



Publication List: André Kretzschmar

Publications with  indicate that the original data and, if applicable, scripts of the statistical analysis were published. Publications with  indicate Open Access publications.

Journal Articles (with peer-review)

- 14) **Kretzschmar, A.**, & Gignac, G. E. (2019). At what sample size do latent variable correlations stabilize? *Journal of Research in Personality*, 80, 17–22.
<https://doi.org/10.1016/j.jrp.2019.03.007> 
- 13) **Kretzschmar, A.**, Spengler, M., Schubert, A.-L., Steinmayr, R., & Ziegler, M. (2018). The Relation of Personality and Intelligence—What Can the Brunswik Symmetry Principle Tell Us? *Journal of Intelligence*, 6(3), 30. <https://doi.org/10.3390/jintelligence6030030> 
- 12) Süß, H.-M., & **Kretzschmar, A.** (2018). Impact of Cognitive Abilities and Prior Knowledge on Complex Problem Solving Performance – Empirical Results and a Plea for Ecologically-valid Microworlds. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.00626>  
- 11) Baggen, Y., Mainert, J., **Kretzschmar, A.**, Lans, T., Biemans, H. J. A., Niepel, C., & Greiff, S. (2017). Complex Problems in Entrepreneurship Education: Examining Complex Problem-Solving in the Application of Opportunity Identification. *Education Research International*, 2017, 1–13. <https://doi.org/10.1155/2017/1768690> 
- 10) Gignac, G. E., & **Kretzschmar, A.** (2017). Evaluating dimensional distinctness with correlated-factor models: Limitations and suggestions. *Intelligence*, 62, 138–147.
<http://doi.org/10.1016/j.intell.2017.04.001>
- 9) **Kretzschmar, A.** (2017). Sometimes less is not enough: A commentary on Greiff et al. (2015). *Journal of Intelligence*, 5(1). <http://doi.org/10.3390/jintelligence5010004> 
- 8) **Kretzschmar, A.**, Hacatrjana, L., & Rascevska, M. (2017). Re-evaluating the psychometric properties of MicroFIN: A multidimensional measurement of complex problem solving or a unidimensional reasoning test? *Psychological Test and Assessment Modeling*, 59(2), 157–182. [Link to PDF](#)  
- 7) **Kretzschmar, A.**, Neubert, J. C., Wüstenberg, S., & Greiff, S. (2016). Construct validity of complex problem solving: A comprehensive view on different facets of intelligence and school grades. *Intelligence*, 54, 55–69. <http://doi.org/10.1016/j.intell.2015.11.004> 
- 6) **Kretzschmar, A.**, & Süß, H.-M. (2015). A study on the training of complex problem solving competence. *Journal of Dynamic Decision Making*, 1, 4.
<https://doi.org/10.11588/jddm.2015.1.15455>  
- 5) Mainert, J., **Kretzschmar, A.**, Neubert, J. C., & Greiff, S. (2015). Linking complex problem solving and general mental ability to career advancement: Does a transversal skill reveal incremental predictive validity? *International Journal of Lifelong Education*, 34(4), 393–411.
<http://doi.org/10.1080/02601370.2015.1060024>

- 4) Neubert, J. C., **Kretzschmar, A.**, Wüstenberg, S., & Greiff, S. (2015). Extending the assessment of complex problem solving to finite state automata: Embracing heterogeneity. *European Journal of Psychological Assessment*, 31(3), 181–194. <http://doi.org/10.1027/1015-5759/a000224>
- 3) Neubert, J. C., Mainert, J., **Kretzschmar, A.**, & Greiff, S. (2015). The assessment of 21st century skills in industrial and organizational psychology: Complex and collaborative problem solving. *Industrial and Organizational Psychology*, 8(2), 238–268. <http://doi.org/10.1017/iop.2015.14>
- 2) Greiff, S., **Kretzschmar, A.**, Müller, J. C., Spinath, B., & Martin, R. (2014). The computer-based assessment of complex problem solving and how it is influenced by students' information and communication technology literacy. *Journal of Educational Psychology*, 106(3), 666–680. <http://doi.org/10.1037/a0035426>
- 1) **Kretzschmar, A.**, Neubert, J. C., & Greiff, S. (2014). Komplexes Problemlösen, schulfachliche Kompetenzen und ihre Relation zu Schulnoten [Complex problem solving, school competencies and their relation to school grades]. *Zeitschrift für Pädagogische Psychologie*, 28(4), 205–215. <http://doi.org/10.1024/1010-0652/a000137>

Editorials

- 1) Greiff, S., **Kretzschmar, A.**, & Leutner, D. (2014). Editorial zum Themenheft Problemlösen in der Pädagogischen Psychologie [Editorial to the special issue: Problem solving in educational psychology]. *Zeitschrift für Pädagogische Psychologie*, 28(4), 161–166. <http://doi.org/10.1024/1010-0652/a000140>

Invited Talks

- 2) **Kretzschmar, A.** (2018, December). *Kognitive Persönlichkeitseigenschaften im 21. Jahrhundert – Neue Einsichten durch innovative Messinstrumente [Cognitive personality traits in the 21st century – New insights based on innovative assessment tools]*. Invited talk as part of the series of lectures “New research of psychological assessment and differential psychology” at the Psychologische Hochschule Berlin (PHB), Berlin, Germany.
- 1) **Kretzschmar, A.** (2017, July). *Construct validity of complex problem solving with particular focus on modern assessment approaches*. Invited talk at the 14th Conference at the European Association of Psychological Assessment (EAPA), Lisbon, Portugal.

Conference Contributions (with peer-review)

Organized Symposia

- 1) **Kretzschmar, A.**, Stadler, M. (2019, February). *Das Potenzial der komplexen Problemlösekompetenz für die empirischen Bildungswissenschaften [The potential of complex problem solving for educational sciences]*. Symposium at the 7th meeting of the Society for Empirical Educational Research (GEBF), Cologne, Germany.

Talks and Posters

- 23) **Kretzschmar, A.**, Nebe, S., Spengler, M., Ziegler, M. (2019, September). *Which intelligence construct is most highly associated with school grades?—No, it's not the one assessed with matrices tests*. In F. Schmitz (Chair), *Disentangling Cognitive Abilities*. Symposium at the 15th meeting of the section Personality Psychology and Psychological Diagnostics of the German Psychological Society (DGPs), Dresden, Germany.
- 22) Nebe, S, **Kretzschmar, A.**, Tobler, P. (2019, June). *Habits as a Function of Choice Frequency: A Novel Experimental Approach to Study Human Habits*. Poster presented at the 4th Conference on Reinforcement Learning and Decision Making (RLDM), Montréal, Canada
- 21) **Kretzschmar, A.** (2019, June). *Towards a Broader Understanding: The Association Between Complex Problem Solving and Non-Cognitive Personality Traits*. Poster presented at the 6th Meeting of the Association for Research in Personality (ARP), Grand Rapids, Michigan, USA.
- 20) Nebe, S, **Kretzschmar, A.**, Tobler, P. (2019, June). *Realigning Theory with Practice: A Novel Experimental Approach to Study Human Habits in the Lab*. Poster presented at the 45th Meeting of Psychologie und Gehirn (PuG), Dresden, Germany.
- 19) **Kretzschmar, A.**, (2019, February). *Komplexes Problemlösen als transversale Kompetenz: Ein Vergleich der Prädiktion von Schulnoten durch domänenübergreifende und domänenspezifische Kompetenzen [Complex problem solving as a transversal competency: A comparison of domain-general and domain-specific competencies with regard to school grades]*. Paper presented at the 7th meeting of the Society for Empirical Educational Research (GEBF), Cologne, Germany.
- 18) **Kretzschmar, A.**, Sonnleitner, P. (2018, July). *The validity of lower-order dimensions: A psychometrical investigation of complex problem solving competence*. Paper presented at the 19th European Conference on Personality (ECP), Zadar, Croatia.
- 17) **Kretzschmar, A.** (2017, September). *Der Einfluss konstruktrepräsentativer Operationalisierungen am Beispiel von Komplexem Problemlösen (KPL) und Intelligenz [The impact of construct representative Operationalizations: The example of complex problem solving and intelligence]*. Paper presented at the 14th meeting of the section Personality Psychology and Psychological Diagnostics of the German Psychological Society (DGPs), Munich, Germany.
- 16) **Kretzschmar, A.** (2017, July). *The impact of the operationalization of intelligence: Complex problem solving as an independent construct?* Paper presented at the 18th meeting of the International Society for Intelligence Research (ISIR), Montreal, Canada.
- 15) **Kretzschmar, A.** (2016, September). *Eine Trainingsstudie zur Förderung der Komplexen Problemlösekompetenz [A training study of of complex problem solving]*. Paper presented at the 50th meeting of the German Psychological Society (DGPs), Leipzig, Germany.
- 14) **Kretzschmar, A.** (2016, September). *Die Struktur der kognitiven Fähigkeiten im 21. Jahrhundert [The structure of cognitive personality traits in the 21st century]*. Paper presented at the 1st workshop of the section Personality Psychology and Psychological Diagnostics of the German Psychological Society (DGPs), Göttingen, Germany.

- 13) Mainert, J., Niepel, C., **Kretzschmar, A.**, & Greiff, S. (2016, April). Complex problem solving at work: An empirical construct validation. In L. A. Wegman (Chair), *The Changing Nature of Work: Evidence and Implications*. Symposium at the 31st meeting of the Society of Industrial-Organizational Psychology (SIOP), Anaheim, California, USA.
- 12) Mainert, J., **Kretzschmar, A.**, Neubert, J., & Greiff, S. (2015, May). *Cognitive predictors of individual occupational careers in the 21st century – Do complex problem solving skills matter beyond general mental ability?* Paper presented at the 17th meeting of the European Association of Work and Organizational Psychology (EAWOP), Oslo, Norway.
- 11) **Kretzschmar, A.**, Müller, J., & Greiff, S. (2014, September). *Komplexes Problemlösen und Intelligenz. Neue Erkenntnisse durch neue Diagnostikinstrumente? [Complex problem solving and intelligence: New insights based on new assessment tools?]* Paper presented at the 49th meeting the German Psychological Society (DGPs), Bochum, Germany.
- 10) **Kretzschmar, A.**, Müller, J., & Greiff, S. (2014, July). Strategies within complex problem solving. Inquiries into exploration behavior in MicroFIN. In F. Goldhammer (Chair), *Exploiting potentials of behavioral process data from computer-based testing*. Symposium at the 9th meeting of the International Test Commission (ITC), San Sebastian, Spain.
- 9) Mainert, J., **Kretzschmar, A.**, Müller, J., & Greiff, S. (2014, August). *Determinants of individual occupational careers in the 21st century – Why complex problem solving matters beyond general mental ability*. Paper presented at the 7th meeting of the EARLIE SIG 14 (Learning and Professional Development), Oslo, Norway.
- 8) Müller, J., **Kretzschmar, A.**, & Greiff, S. (2014, March). Die Erfassung komplexer Problemlösefähigkeiten auf Basis Finiter Automaten: Der MicroFIN Ansatz [The assessment of complex problem solving via finite state automata: The MicroFIN approach]. In R. Nickolaus (Chair), *Modellierung, Messung, erreichte Niveaus und Bezüge zwischen allgemeiner und berufsspezifischer Problemlösefähigkeit*. Symposium at the 2nd meeting of the Society for Empirical Educational Research (GEBF) (GEBF), Frankfurt am Main, Germany.
- 7) **Kretzschmar, A.** (2013, April). *Komplexes Problemlösen, Lebenslanges Lernen und Berufserfolg [Complex problem solving, lifelong learning and job performance]*. Paper presented at the 10th workshop for PhD students of the section Personality Psychology and Psychological Diagnostics of the German Psychological Society (DGPs), Landau, Germany.
- 6) **Kretzschmar, A.**, & Greiff, S. (2013, May). *Classical and transversal skills in individual's occupational careers*. Paper presented at the 16th meeting of the European Association of Work and Organizational Psychology (EAWOP), Münster, Germany.
- 5) **Kretzschmar, A.**, Müller, J., & Greiff, S. (2013, September). *Der MicroFIN-Ansatz. Eine erweiterte Erfassung von Problemlösefähigkeit [The MicroFIN approach: An extended assessment approach of complex problem solving]*. Paper presented at the 12th meeting of the section Personality Psychology and Psychological Diagnostics of the German Psychological Society (DGPs), Greifswald, Germany.
- 4) **Kretzschmar, A.**, Müller, J., & Greiff, S. (2013, August). Classical and transversal cognitive skills in individual's occupational careers. In H. Muukkonen (Chair), *Generating working life competencies during higher education*. Symposium at the 15th meeting of the European Association for Research in Learning and Instruction (EARLI), Munich, Germany.
- 3) **Kretzschmar, A.**, Müller, J., & Greiff, S. (2013, Juli). *Assessment of complex problem solving: The new MicroFIN approach*. Paper presented at the 12th meeting of the European Association of Psychological Assessment (EAPA), San Sebastian, Spain.

- 2) Müller, J., **Kretzschmar, A.**, & Greiff, S. (2013). *Exploring exploration: Inquiries into exploration behavior in complex problem solving assessment*. In S. K. D'Mello, R. A. Calvo, & A. Olney (Chairs), Proceedings of the 6th International Conference on Educational Data Mining (pp. 336–337).
- 1) Wüstenberg, S., Müller, J., **Kretzschmar, A.**, Funke, J., & Greiff, S. (2013, August). *Determinants of cross-national gender differences in complex problem solving competency*. Paper presented at the 15th meeting of the European Association for Research in Learning and Instruction (EARLI), Munich, Germany.

Research Plenaries and Workshop Contributions

- 9) Greiff, S., Mainert, J., & **Kretzschmar, A.** (2015, September). *Thematic workshop on complex problem solving*. Paper presented at the LLLight'in'Europe Final Results Conference, Brussels, Belgium.
- 8) **Kretzschmar, A.**, Neubert, J., Wüstenberg, S., & Greiff, S. (2015, April). *Complex problem solving within the nomological network of intelligence*. Paper presented at the 7th Szeged Workshop on Educational Evaluation, Szeged, Hungary.
- 7) Greiff, S., **Kretzschmar, A.**, Mainert, J., & Neubert, J. (2014, October). *Progress in the LLLight'in'Europe project. Report from the assessment team from Luxembourg*. Paper presented at the LLLight'in'Europe Consortium Meeting at the Beijing Normal University, Beijing, China.
- 6) Mainert, J., **Kretzschmar, A.**, Müller, J., & Greiff, S. (2014, April). *Political implications of educational large scale assessments on the example of complex problem solving*. Paper presented at the 6th Szeged Workshop on Educational Evaluation, Szeged, Hungary.
- 5) Neubert, J., **Kretzschmar, A.**, & Greiff, S. (2014, October). *Extending the assessment of complex problem solving to finite state automata – Embracing heterogeneity*. Paper presented at the 2nd LLLight'in'Europe Research Plenary, Beijing, China.
- 4) **Kretzschmar, A.**, Müller, J., Wolff, C., & Greiff, S. (2013, April). *Complex problem solving within the LLLight'in'Europe research project*. Paper presented at the 5th Szeged Workshop on Educational Evaluation, Szeged, Hungary.
- 3) Wolff, C., Müller, J., **Kretzschmar, A.**, & Greiff, S. (2013, April). *Beyond reasoning? Searching for the construct of complex problem solving*. Paper presented at the 5th Szeged Workshop on Educational Evaluation, Szeged, Hungary.
- 2) Greiff, S., Müller, J., & **Kretzschmar, A.** (2012, October). *Assessment of problem solving as indicator for lifelong learning processes in a business context*. Paper presented at the 1st LLLight'in'Europe Research Plenary, Friedrichshafen, Germany.
- 1) Müller, J., Hilse, J. C., **Kretzschmar, A.**, Pöll, U., & Greiff, S. (2012, April). *Project introduction: Interactive problem solving and lifelong learning*. Paper presented at the 4th Szeged Workshop on Educational Evaluation, Hungary.