

## CURRICULUM VITAE

Kou Murayama

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### Current Position

Professor of Psychology and Cognitive Neuroscience

### Current Affiliation

School of Psychology and Clinical Language Sciences, Faculty of Life Sciences, University of Reading

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### Education

2000 University of Tokyo, B.S., Educational Psychology

2002 University of Tokyo, M. A., Educational Psychology

2006 University of Tokyo, Ph. D., Educational Psychology

### Academic Positions

2006 - 2008 Visiting Research Fellow, University of Rochester

2006 - 2009 Postdoctoral Research Fellow, Tokyo Institute of Technology  
(funded by Japan Society for the Promotion of Science)

2009 - 2012 Postdoctoral Research Fellow, University of Munich, Germany

2010 - 2012 Alexander von Humboldt Research Fellow, University of Munich, Germany

2012 - 2013 Postdoctoral Research Fellow, University of California, Los Angeles

2013 - 2015 Lecturer, University of Reading

2015 - Associate Professor, University of Reading

2016- Distinguished Guest Professor, Hector Research Institute of Education Sciences  
and Psychology, University of Tübingen

2016- Honorary Professor, Kochi University of Technology

### Professional Experience

2012 - 2015 Associate Editor, Japanese Journal of Educational Psychology

2008 - 2009 Committee for Common Achievement Test Organization for Medical Schools

2000 - 2006 Teaching support staff, Ebara junior-high school

2004 - 2005 Doctoral course fellow, Japan Society for the Promotion of Science

- 2004 - 2005      Research assistant, Center for Research of Core Academic Competences  
 2003              Teaching assistant, the University of Tokyo  
 2002              Research assistant, the University of Tokyo

### Teaching Experience

- 2015 -            Research Methods and Data Analysis, University of Reading  
 2015              Metacognition, University of Reading  
 2014 -            Human motivation, University of Reading  
 2011              Structural equation modeling, University of Munich (Short course)  
 2008              Structural equation modeling, Simon Fraser University (Short course)  
 2008              Educational statistics, Rissho University  
 2004 - 2006      Educational statistics, Tokyo Kasei University

### Awards and Honors

- 2016    F. J. McGuigan Early Career Investigator Prize (American Psychological Foundation)  
 2016    International Mind, Brain, and Education Society Early Career Award  
 2016    Transforming Education through Neuroscience Award (Learning & the Brain Foundation)  
 2015    JSPS Prize (Japan Society for the Promotion of Science)  
 2014    Distinguished Paper Award (Japanese Association of Educational Psychology)  
 2013    The Richard E. Snow Awards for Early Contributions (American Psychological Association)  
 2013    Distinguished Young Researcher Award for International Research (Japanese Psychological Association)  
 2008    Distinguished Presentation Award (Japanese Society for Cognitive Psychology)  
 2006    Distinguished Paper Award (Japanese Association of Educational Psychology)  
 2004    *Kido* Best Paper Award (Japanese Association of Educational Psychology)

### Research Interests

- \* Motivation: Achievement goals, intrinsic motivation, curiosity, reward processing
- \* Memory and learning process: Memory consolidation, dual process model
- \* Metacognition: Metamemory, self-regulated learning
- \* Multivariate statistical methods: Structural equation modeling, mixed-effects modeling, longitudinal data analysis, Bayesian analysis

### Peer-Reviewed Papers in English

- Vogl, E., Pekrun, R., Murayama, K. & Loderer, K. (in press). Surprised – Curious – Confused: Epistemic Emotions and Knowledge Exploration. *Emotion*.
- Usami, S., Murayama, K. & Hamaker, E. L. (in press). A Unified Framework of Longitudinal Models to Examine Reciprocal Relations. *Psychological Methods*.
- Hudson, J. L., Murayama, K., Meteyard, L., Morris, T., & Dodd, H. F. (in press). Early childhood predictors of anxiety in early adolescence. *Journal of Abnormal Child Psychology*.
- Pekrun, R., Murayama, K., Marsh, H. W., Goetz, T. & Frenzel, A. C. (in press). Happy Fish in Little Ponds: Testing a reference group model of achievement and emotions. *Journal of Personality and Social Psychology*.
- Burgess, L. G., Riddell, P. M., Fancourt, A., Murayama, K. (in press). The Influence of Social Contagion within Education: A Motivational Perspective. *Mind, Brain and Education*.
- Ishikawa, S., Ishii, R., Fukuzumi, N., Murayama, K., Ohtani, K., Sakaki, M., Suzuki, T., & Tanaka, A. (in press). Development, reliability, and validity of the Japanese short version of the Spence Children's Anxiety Scale for adolescents. *Anxiety Disorder Research* (in Japanese)

- Usami, S., & Murayama, K. (in press). Time-Specific Errors in Growth Curve Modeling: Type-1 Error Inflation and A Possible Solution with Mixed-effects Models. *Multivariate Behavioral Research*.
- Lawrence, P. J, Murayama, K. & Creswell, C. (2019). Anxiety and depressive disorders in offspring of parents with anxiety disorders: a meta-analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*. 58, 46-60.
- Marsh, H. W., Pekrun, R., Parker, P. D., Murayama, K., Guo, J., Dicke, T., & Arens, A. K. (2018). The murky distinction between self-concept and self-efficacy: Beware of lurking jingle-jangle fallacies. *Journal of Educational Psychology*.
- Scholer, A. A., Miele, D. B., Murayama, K., & Fujita, K., (2018). New Directions in Self-Regulation: The Role of Metamotivational Beliefs. *Current Directions in Psychological Science*.27, 437-442.
- Fastrich, G. M., Kerr, T., Castel, A. D., & Murayama, K. (2018). The role of interest in memory for trivia questions: An investigation with a large-scale database. *Motivation Science*. 4, 227-250.
- Ueno, T., Meteyard, L., Hoffman, P., & Murayama, K., (2018). The ventral anterior temporal lobe has a necessary role in exception word reading. *Cerebral Cortex*.
- Sakaki, M., Yagi, A., & Murayama, K. (2018). Curiosity in old age: A possible key to achieving adaptive aging. *Neuroscience and Biobehavioral Reviews*.88, 106-116.
- Takeda, K., Ikezawa, S., Matsumoto, M., Murayama, K., Sumiyoshi, T., Matsumoto, K., & Nakagome, K. (2018). Neural correlates for intrinsic motivational deficits of schizophrenia; Implications for therapeutics of cognitive impairment. *Frontiers in Psychiatry*. 9:178.
- Sakaki, M., Yagi, A., & Murayama, K. (2018). Curiosity in old age: A possible key to achieving adaptive aging. *Neuroscience and Biobehavioral Reviews*.88, 106-116.
- Elliot, A. J., Aldhobaiban, N., Murayama, K., Kobeisy, A., Gocłowska, M. A., & Khyat, A. (2018). Impression management and achievement motivation: Investigating substantive links. *International Journal of Psychology*. 53, 16-22.
- Marsh, H. W., Pekrun, R., Murayama, K., Arens, A. K., Parker, P. D., Guo, J., & Dicke, T. (2018). An integrated model of academic self-concept development: Academic self-concept, grades, test scores, and tracking over six years. *Developmental Psychology*.54, 263-280.
- Weinstein, N., Przybylski, A. K., & Murayama, K. (2017). A prospective study of the motivational and health dynamics of Internet Gaming Disorder. *Peer J*. 5:e3838
- Elliot, A. J., Jury, M., & Murayama, K. (2017). Trait and perceived environmental competitiveness in achievement situations. *Journal of Personality*. 86, 353-367.
- Hamm, J. M., Perry, R. P., Chipperfield, J. G., Murayama, K., & Weiner, B. (2017). Attribution-based motivation treatment efficacy in an online learning environment for students who differ in cognitive engagement. *Motivation and Emotion*. 41, 600-616.
- Takeda, K., Matsumoto, M, Ogata, Y., Maida, K., Murakami, H., Murayama, K., Shimoji, K., Hanakawa, T., Matsumoto, K., & Nakagome, K. (2017). Impaired prefrontal activity to regulate the intrinsic motivation-action link in schizophrenia. *NeuroImage: Clinical*, 16, 32-42.
- Pekrun, R., Lichtenfeld, S., Marsh, H. W., Murayama, K., & Goetz, T. (2017). Achievement emotions and adolescents' academic performance: Longitudinal models of developmental ordering. *Child Development*. 88, 1653-1670.
- Arens, A. K., Marsh, H. W., Pekrun, R., Lichtenfeld, S., Murayama, K., vom Hofe, R. (2017). Math self-concept, grades, and achievement test scores: Long-term reciprocal effects across five waves and three achievement tracks. *Journal of Educational Psychology*, 109, 621-634.
- Takeda, K., Matsumoto, M, Ogata, Y., Maida, K., Murakami, H., Murayama, K., Shimoji, K., Hanakawa, T., Matsumoto, K., & Nakagome, K. (2017). Impaired prefrontal activity to regulate the intrinsic motivation-action link in schizophrenia. *NuroImage: Clinical*, 16, 32-42.
- Middlebrooks, C. D., Murayama, K., & Castel, A. D. (2017). Test expectancy and memory for important information. *Journal of Experimental Psychology: Learning, Memory, and*

- Cognition*. 43, 972-985.
- Gocłowska, M. A., Aldhobaiban, N., Elliot, A. J., Murayama, K., Kobeisy, A., & Abdelaziz, A. (2017). Temperament and self-based correlates of cooperative, competitive and individualistic learning preferences. *International Journal of Psychology*. 52, 180-188.
- Marsh, H. M., Pekrun, R., Parker, P. D., Murayama, K., Guo, J., Dicke, T., & Lichtenfeld, S. (2017). Long-term positive effects of repeating a year in school: Six-year longitudinal study of self-beliefs, anxiety, social relations, school grades, and test scores. *Journal of Educational Psychology*. 109, 425-438.
- Hargis, M., Yue, C. L., Kerr, T., Ikeda, K., Murayama, K., & Castel, A. D. (2017). Metacognition and proofreading: The roles of aging, motivation, and interest. *Aging, Neuropsychology, and Cognition*. 24, 216-226.
- Rhodes, M. G., Witherby, A. E., Castel, A. D., & Murayama, K. (2017). Explaining the forgetting bias effect on value judgments. *Memory & Cognition*. 45, 362-374.
- Przybylski, A., Weinstein, N., & Murayama, K. (2017). Open scientific practices are the way forward for internet gaming disorder research: Response to Yao et al. *American Journal of Psychiatry*. 174, 487.
- Przybylski, A., Weinstein, N., & Murayama, K. (2017). Internet gaming disorder: Investigating the clinical relevance of a new phenomenon. *American Journal of Psychiatry*. 174, 230-236.
- Warwick, H., Reardon, T., Cooper, P., Murayama, K., Reynold, S., Wilson, C., & Creswell, C. (2017). Complete recovery from anxiety disorders following cognitive behavior therapy in children and adolescents: A meta-analysis. *Clinical Psychology Review*, 52, 77-91.
- Ikeda, K., Yue, C. L., Murayama, K., & Castel, A. (2016). Achievement goals affect metacognitive judgments. *Motivation Science*, 2, 199-219.
- Murayama, K., Kitagami, S., Tanaka, A., & Raw, J. A. (2016). People's naiveté about how extrinsic rewards influence intrinsic motivation. *Motivation Science*. 2, 138-142.
- Sugiura, A., Aoki, R., Murayama, K., Yomogida, Y., Haji, T., Saito, A., Hasegawa, T., & Matsumoto, K. (2016). Regional gray matter volume in the posterior precuneus is associated with general self-efficacy. *NeuroReport*, 27, 1350-1353.
- Elliot, A., Aldhobaiban, N., Kobeisy, A., Murayama, K., Gocłowska, M. A., & Lichtenfeld, S. (2016). Linking social interdependence preferences to achievement goal adoption. *Learning and Individual Differences*, 50, 291-295.
- Murayama, K., Pekrun, R., Suzuki, M., Marsh, H. W., & Lichtenfeld, S. (2016). Don't aim too high for your kids: Parental over-aspiration undermines students' learning in mathematics. *Journal of Personality and Social Psychology*, 111, 766-779. [featured in the Guardian, the Telegraph, etc.]
- Marsh, H. W., Pekrun, R., Lichtenfeld, S., Guo, J., Arens, A. K., & Murayama, K. (2016). Breaking the double-edged sword of effort/trying hard: Developmental equilibrium and longitudinal relations among effort, achievement, and academic self-concept. *Developmental Psychology*, 52, 1273-1290.
- Murayama, K., Blake, A., Kerr, T., & Castel, A. D. (2016). When enough is not enough: Information overload and metacognitive decisions to stop studying information. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 42, 914-924. [featured as Particularly Exciting Experiments in Psychology by APA]
- Middlebrook, C. D., Murayama, K., & Castel, A. D. (2016). The value in rushing: Memory and selectivity when short on time. *Acta Psychologica*, 170, 1-9.
- Castel, A. D., Friedman, M. C., McGillivray, S., Flores, C. C., Murayama, K., Kerr, T., & Drolet, A. (2016). I owe you: Age-related similarities and differences in associated memory for gains and losses. *Aging, Neuropsychology and Cognition*, 23, 549-565.
- Kuhbandner, C., Aslan, A., Emmerdinger, K., & Murayama, K. (2016). Providing extrinsic reward for test performance undermines long-term memory acquisition. *Frontiers in Psychology*, 7, 79.
- Ueno, T., Fastrich, G., & Murayama, K. (2016). Meta-analysis to integrate effect sizes within a paper: Possible misuse and Type-1 error inflation. *Journal of Experimental Psychology: General*, 145, 643-654.

- Yamagata, B., Murayama, K., Black, J. M., Hancock, R., Mimura, M., Yang, T. T., Reiss, A. L. & Hoefl, F. (2016). Female-specific intergenerational transmission patterns of the human corticolimbic circuitry. *Journal of Neuroscience*, *36*, 1254-1260.
- Middlebrooks, C. D., McGillivray, S., Murayama, K., & Castel, A. D. (2016). Memory for allergies and health foods: How younger and older adults strategically remember critical health information. *Journal of Gerontology: Psychological Sciences*, *71*, 389-399.
- Goetz, T., Sticca, F., Pekrun, R., Murayama, K., & Elliot, A. J. (2016). Intraindividual relations between achievement goals and discrete achievement emotions: An experience sampling approach. *Learning and Instruction*, *41*, 115-125.
- McGillivray, S., Murayama, K., & Castel, A. D. (2015). Thirst for knowledge: The effects of curiosity and interest on memory in younger and older adults. *Psychology and Aging*, *30*, 835-841.
- Weidman, A. C., Augustine, A. A., Murayama, K., & Elliot, A. J. (2015). Internalizing symptomatology and academic achievement: Bi-directional prospective relations in adolescence. *Journal of Research in Personality*, *58*, 106-114.
- Murayama, K., Matsumoto, M., Izuma, K., Sugiura, A., Ryan, R. M., Deci, E. L., & Matsumoto, K. (2015). How self-determined choice facilitates performance: A key role of the ventromedial prefrontal cortex. *Cerebral Cortex*, *25*(5), 1241-1251.
- Elliot, A. J., Murayama, K., Kobeisy, A., & Lichtenfeld, S. (2015). Potential-based achievement goals. *British Journal of Educational Psychology*, *85*, 192-206.
- Ikeda, K., Castel, A. D., & Murayama, K. (2015). Mastery-approach goals eliminate retrieval-induced forgetting: The role of achievement goals in memory inhibition. *Personality and Social Psychology Bulletin*, *41*, 687-695.
- Izuma, K., Akula, S., Murayama, K., Wu, D.-A., Iacoboni, M. & Adolphs, R. (2015). A causal role for posterior medial prefrontal cortex in choice-induced preference change. *Journal of Neuroscience*, *35*, 3598-3606.
- Kovas, Y., Garon-Carrier, G., Boivin, M., Petrill, S. A., Plomin, R., Malykh, S. B., Spinath, F., Murayama, K., Ando, J., Bogdanova, O. Y., Brendgen, M., Dionne, G., Forget-Dubois, N., Gottschling, J., Guay, F., Lemelin, J.-P., Logan, J. A., Yamagata, S., Shikishima, C., Spinath, B., Thompson, L. A., Tikhomirova, T. N., Tosto, M. G., Tremblay, R. E., & Vitaro, F. (2015). Why do children differ in motivation to learn: Insights from over 13,000 twins from 6 countries. *Personality and Individual Differences*, *80*, 51-63.
- Friedman, M., McGillivray, S., Murayama, K. & Castel, A. D. (2015). Memory for medication side effects in younger and older adults: The role of subjective and objective importance. *Memory & Cognition*, *42*, 206-215.
- Eich, T. S., Murayama, K., Castel, A. D., & Knowlton, B. J. (2014). The dynamic effects of age-related stereotype threat on explicit and implicit memory performance in older adults. *Social Cognition*, *32*, 559-570.
- Tanaka, A. & Murayama, K. (2014). Within-person analyses of situational interest and boredom: Interactions between task-specific perceptions and achievement goals. *Journal of Educational Psychology*, *106*, 1122-1134.
- Murayama, K., Miyatsu, T., Buchli, D., & Storm, B. C. (2014). Forgetting as a consequence of retrieval: A meta-analytic review of retrieval-induced forgetting. *Psychological Bulletin*, *140*, 1383-1409.
- Braver, T. S., Krug, M. K., Chiew, K. S., Kool, W., Clement, N. J., Adcock, A., Barch, D. M., Botvinick, M. M., Carver, C. S., Cols, R., Custers, R., Dickinson, A. R., Dweck, C. S., Fishbach, A., Gollwitzer, P. M., Hess, T. M., Isaacowitz, D. M., Mather, M., Murayama, K., Pessoa, L., Samanez-Larkin, G. R., & Somerville, L. H. (2014). Mechanisms of motivation-cognition interaction: Challenges and opportunities. *Cognitive, Affective, & Behavioral Neuroscience*, *14*, 443-472.
- Murayama, K., Sakaki, M., Yan, V. X., & Smith, G. M. (2014). Type-1 error inflation in the traditional by-participant analysis to metamemory accuracy: A generalized mixed-effects model perspective. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, *40*, 1287-1306.

- Aoki, R., Matsumoto, M., Yomogida, Y., Izuma, K., Murayama, K., Sugiura, A., Camerer, C. F., Adolphs, R., & Matsumoto, K. (2014). Social equality in the number of choice options is represented in the ventromedial prefrontal cortex. *Journal of Neuroscience*, *34*, 6413-6421.
- Murayama, K., Pekrun, R., & Fiedler, K. (2014). Research practices that can prevent an inflation of false-positive rates. *Personality and Social Psychology Review*, *18*, 107-118.
- Murayama, K. & Kitagami, S. (2014). Consolidation power of extrinsic rewards: Reward cues enhance long-term memory for irrelevant past events. *Journal of Experimental Psychology: General*, *143*, 15-20. [featured as Particularly Exciting Experiments in Psychology by APA; featured in Yahoo News]
- Pekrun, R., Cusack, A., Murayama, K., Elliot, A. J., & Thomas, K. (2014). The power of anticipated feedback: Effects on students' achievement goals and achievement emotions. *Learning and Instruction*, *29*, 115-124.
- Storm, B. C., Friedman, M. C., Murayama, K., & Bjork, R. A. (2014). On the transfer of prior tests or study events to subsequent study. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *40*, 115-124.
- Murayama, K., Pekrun, R., Lichtenfeld, S., & vom Hofe, R. (2013). Predicting long-term growth in students' mathematics achievement: The unique contributions of motivation and cognitive strategies. *Child Development*, *84*, 1475-1490. [featured in Time Magazine (USA), Wall Street Journal (USA), Scientific American (USA), Healthday (USA), Focus (Germany), and Huffpost (France)]
- Sakaki, M. & Murayama, K. (2013). Automatic ability attribution after failure: A dual process view of achievement attribution. *PLoS ONE*, *8*(5), e63066.
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, well-being, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, *29*, 1841-1848.
- Castel, A. D., Murayama, K., Friedman, M. C., McGillivray, S., & Link, I. (2013). Selecting valuable information to remember: Age-related differences and similarities in self-regulated learning. *Psychology & Aging*, *28*, 232-242.
- Izuma, K. & Murayama, K. (2013). Choice-induced preference change in the free-choice paradigm: A critical methodological review. *Frontiers in Psychology*, *4*:41.(the authors equally contributed to the paper)
- Murayama, K. & Elliot, A. J. (2012). Further clarifying the competition-performance relation: Reply to Johnson et al. (2012). *Psychological Bulletin*, *138*, 1079-1084.
- Murayama, K. & Elliot, A. J. (2012). The competition-performance relation: A meta-analytic review and test of the opposing processes model of competition and performance. *Psychological Bulletin*, *138*, 1035-1070 (with commentary) [featured in Los Angeles Times].
- Elliot, A. J., Sedikides, C., Murayama, K., Tanaka, A., Thrash, T. M., & Mapes, R. R. (2012). Cross-cultural generality and specificity in self-regulation: Avoidance personal goals and multiple aspects of wellbeing in the U.S. and Japan. *Emotion*, *12*, 1031-1040.
- Law, W., Elliot, A. J., & Murayama, K. (2012). Perceived competence moderates the relation between performance-approach and performance-avoidance goals. *Journal of Educational Psychology*, *104*, 806-819.
- Lichtenfeld, S., Pekrun, R., Stupnisky, R. H., Reiss, K., & Murayama, K. (2012). Measuring students' emotions in the early years: The achievement emotions questionnaire-elementary school (AEQ-ES). *Learning and Individual Differences*, *22*, 190-201.
- Przybylski, A. K., Weinstein, N., Murayama, K., Lynch, M. F., & Ryan, R. M. (2012). The ideal self at play: The appeal of video games that let you be all you can be. *Psychological Science*, *23*, 77-85. [feted in Eurogamer.net news]
- Murayama, K. & Elliot, A. J. (2011). Achievement motivation and memory: Achievement goals differentially influence immediate and delayed remember-know recognition memory. *Personality and Social Psychology Bulletin*, *37*, 1339-1348.
- Elliot, A. J., Murayama, K., & Pekrun, R. P. (2011). A 3 x 2 achievement goal model. *Journal of Educational Psychology*, *103*, 632-648.

- Suzuki, M., Tanaka, E., Murayama, K., & Ichikawa, S. (2011). Classification of efficient calculation problems and the effect of instruction using an abstract strategy. *Educational Technology Research*, *34*, 75-83. (English translated version)
- Shikishima, C., Yamagata, S., Hiraishi, K., Sugimoto, Y., Murayama, K., & Ando, J. (2011). A simple syllogism-solving test as a predictor of general intelligence. *Intelligence*, *39*, 89-99.
- Murayama, K., Elliot, A. J., & Yamagata, S. (2011). Separation of performance-approach and performance-avoidance goals: A broader analysis. *Journal of Educational Psychology*, *103*, 238-256.
- Elliot, A. J., Thrash, A. M., & Murayama, K. (2011). A longitudinal meditational analysis of self-regulation and well-being: Avoidance personal goals, avoidance coping, stress generation, and subjective well-being. *Journal of Personality*, *79*, 643-674.
- Murayama, K. & Kuhbandner, C. (2011). Money enhances memory consolidation - But only for boring material. *Cognition*, *119*, 120-124.
- Murayama, K., Matsumoto, M., Izuma, K., & Matsumoto, K. (2010). Neural basis of the undermining effect of extrinsic reward on intrinsic motivation. *Proceedings of the National Academy of Sciences of the United States of America*, *107*, 20911-20916. [with Commentary; From the cover; featured in Yahoo News Top (Japan), Sankei press (Japan) and BBC News (UK)]
- Izuma, K., Matsumoto, M., Murayama, K., Samejima, K., Sadato, N. & Matsumoto, K. (2010). Neural correlates of cognitive dissonance and choice-induced preference change. *Proceedings of the National Academy of Sciences of the United States of America*, *107*, 22014-22019 (featured in Yahoo News Top).
- Murayama, K. & Elliot, A. J. (2009). The joint influence of personal achievement goals and classroom goal structures on achievement-relevant outcomes. *Journal of Educational Psychology*, *101*, 432-447.
- Murayama, K., Zhou, M., & Nesbit, J. C. (2009). A cross-cultural examination of the psychometric properties of responses to the achievement goal questionnaire. *Educational and Psychological Measurement*, *69*, 266-286.
- Elliot, A. J. & Murayama, K. (2008). On the measurement of achievement goals: Critique, illustration, and application. *Journal of Educational Psychology*, *100*, 613-628.

#### Peer-Reviewed Papers in Japanese

- Yoshida, T. & Murayama, K. (2013). Why students often fail to use learning strategies that experts find effective? *Japanese Journal of Educational Psychology*, *61*, 32-43. (Distinguished Paper Award)
- Matsumoto, K., Matsumoto, M., Murayama, K., & Izuma, K. (2011). Neural mechanisms of goal-directed behavior and intrinsic motivation. *Japanese Journal of Psychonomic Science*, *29*, 164-170.
- Suzuki, M., Tanaka, E., Murayama, K., & Ichikawa, S. (2010). Classification of efficient calculation problems and the effect of instruction using an abstract strategy. *Japan Journal of Educational Technology*, *34*, 35-43.
- Ichikawa, S., Haebara, T., Sugisawa, T., Seo, M., Kiyokawa, S., Inuzuka, M., Murayama, K., Uesaka, Y., Kobayashi, H., & Shinogaya, K. (2009). Development of COMPASS: Componential assessment for basic competence and study skills in mathematics. *Cognitive Studies*, *16*, 333-347.
- Murayama, K. (2006). Advances in the dual process models of recognition memory: Methodological problems and a proposal of ¥multilevel framework". *Japanese Psychological Review*, *49*, 569-591.
- Takahashi, A., & Murayama, K. (2006). Quantitative and qualitative analyses of achievement in integrated study: Specific nature of task demands in integrated learning. *Japanese Journal of Educational Psychology*, *54*, 371-383.
- Murayama, K. (2006). "Adaptation to the test": A review of problems and perspectives. *Japanese Journal of Educational Psychology*, *54*, 265-279.

- Murayama, K. (2006). Test format scheme and the relation between objective tests and learning strategies. *Japanese Journal of Educational Psychology*, 54, 63-74.
- Murayama, K., & Oikawa, M. (2005). Are avoidance strategies always maladaptive? *Japanese Journal of Educational Psychology*, 53, 273-286. (Distinguished Paper Award, JAEP)
- Murayama, K. (2005). Exploring the mechanism of test-expectancy effects on strategy change. *Japanese Journal of Educational Psychology*, 53, 172-184.
- Murayama, K. (2004). Does the avoidance of help seeking have deleterious effects on achievement? *Developmental Studies in Social Motivation*, 3, 3-11.
- Hashimoto, W. Inuzuka, M., & Murayama, K. (2004). Effects of an abstract theme and daily-life context of information on children's understanding of social scientific concepts. *Japanese Journal of Curriculum Development and Practice*, 27, 21-30.
- Murayama, K. (2004). The three dimensional framework of positive and negative goal representation. *Japanese Journal of Educational Psychology*, 52, 199-213.
- Murayama, K. (2004). Effects of test format on learning strategy and perceived utility. *Japanese Journal of Psychology*, 75, 262-268.
- Murayama, K. (2003). History and recent advances in achievement goal theory: A critical review of Ames and Archer's (1987, 1988) framework. *Japanese Psychological Review*, 46, 564-583.
- Murayama, K. (2003). Test of undifferentiated performance-goal hypothesis. *Developmental Studies in Social Motivation*, 2, 3-11.
- Murayama, K. (2003). Learning strategy use and short- and long-term perceived utility. *Japanese Journal of Educational Psychology*, 51, 130-140.
- Murayama, K. (2003). Test format and learning strategy use. *Japanese Journal of Educational Psychology*, 51, 1-12. (Kido Best Paper Award, JAEP)

#### Non Peer-Reviewed Papers in Japanese

- Murayama, K. & Matsumoto, K. (2015). Neural correlates of intrinsic motivation. *Science of the Living Body*, 66(1), 1-5.
- Murayama, K. (2014). Knowing your motivation: Metamotivation. *Annual Review of Japanese Child Psychology*, 993, 112-116.
- Murayama, K. (2014). Psychology of motivation. *Marketing Researcher*, 123, 10-15.
- Murayama, K. & Matsumoto, K. (2014). Undermining effect and its neural correlates. *Clinical Neuroscience*, 32(1), 73-76.
- Murayama, K. (2012). The concept of validity: Historic and psychometric perspectives. *The Annual Report of Educational Psychology in Japan*, 51, 118-130.
- Murayama, K. (2006). How can you interpret the results from PISA 2003 and TIMSS 2003? *Elementary Science Journal*, 40(5), 14-17.
- Murayama, K. (2005). Test as a tool to improve your class teaching. *Elementary Science Journal*, 39(3), 56-57.
- Murayama, K. (2005). Understanding the basics of PISA: Prevalent misunderstanding of how to interpret the results. *Instruction and Evaluation*, 51(6), 13-17.
- Murayama, K. (2005). Does intrinsic motivation always bring about a desirable effect? *Annual report of Japanese private school survey in educational sociology research group at the University of Tokyo*, 77-88.
- Murayama, K. (2004). Changing students' behavior by changing tests. *Instruction and Evaluation*, 50(7), 58-61.
- Murayama, K. & Takahashi, A. (2004). A survey study for a graduation thesis in a high school. *Network*, 7, 9-11.
- Murayama, K. (2003). An effective teaching strategy for history class with video and movie materials. *Studies on School Counseling*, 2, 99-103.
- Murayama, K. (2003). Current state on Japanese commercially-supplied standardized testing. *Working paper of Center for Research of Core Academic Competences*, 3, 1-28.



## Books in Japanese

Mayekawa, S., & Murayama, K. (in prep). *Principles of Bayesian statistics*. Iwanami Press.

## Chapters in Edited Books in English

Murayama, K. (in press). Neuroscientific and psychological approaches to incentives: Commonality and multi-faceted views. In A. Renninger & S. Hidi (Eds.), *Cambridge handbook on motivation and learning*. Cambridge, UK: Cambridge University Press.

Izuma, K., & Murayama, K. (in press). The neural basis of cognitive dissonance. In E. Harmon-Jones (Ed.), *Cognitive dissonance: Progress on a pivotal theory in social psychology* (2nd edition). Washington, DC: American Psychological Association.

Murayama, K., Goetz, T., Malmberg, L-E., Pekrun, R., Tanaka, A., & Martin, A. J. (2017). Within-person analysis in educational psychology: Importance and illustrations. In D. W. Putwain, & K. Smart (Eds.), *British Journal of Educational Psychology Monograph Series II: Psychological Aspects of Education --- Current Trends: The role of competence beliefs in teaching and learning* (pp. 71-87). Oxford: Wiley.

Murayama, K., Izuma, K., Aoki, R., & Matsumoto, K. (2016). "Your choice" motivates you in the brain: The emergence of autonomy neuroscience. In S. Kim, J. Reeve, & M. Bong (Eds.), *Advances in Motivation and Achievement* (Vol. 19, Recent Developments in Neuroscience Research on Human Motivation), Bingley, UK: Emerald Publishing Limited; pp. 95-125.

Murayama, K. & Elliot, A. J. (2013). The competition-performance relation from the perspective of the opposing processes model. In D. M. McInerney, H. W., Marsh, & R. Craven, R. (Eds.). *Theory driving research: New wave perspectives on self-processes and human development* (*Advances in self research. Vol. 4*). Charlotte, NC: Information Age Publishing.

Murayama, K., Elliot, A. J., & Friedman, R. (2012). Achievement goals and approach-avoidance motivation. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 191-207). Oxford: Oxford University Press.

Elliot, A. J., Conroy, D., Barron, K. E., & Murayama, K. (2010). Achievement motives and goals: A developmental analysis. In M. Lamb, A. M. Freund, & R. M. Lerner (Eds.), *The handbook of life-span development: Vol. 2. Social and emotional development* (pp. 474-510). Hoboken, NJ: Wiley.

Murayama, K. (2008). Objective test items. In E. Anderman (Ed.), *Psychology of classroom learning: An encyclopedia*. Detroit: Macmillan Reference USA.

Friedman, R., Moller, A. C., Fryer, J. W., Zahn, I., Law, W., Acuff, R. D., Niesta, D., Murayama, K., Meier, A. M., Jelstad, B., & Elliot, A. J. (2009). Achievement goals in the context of the hierarchical model of approach-avoidance achievement motivation. In A. Kaplan, S. A. Karabenick & E. DeGroot (Eds.), *Culture, self, and motivation: Essays in honor of Martin L. Maehr* (pp. 111-134). NY: Information Age Publishers.

## Chapters in Edited Books in Japanese

Murayama, K. (in press). Application of confirmatory and Bayesian factor analysis. In T. Nakamura (Eds.), *Factor analysis: Theory and application*. Tokyo: Asakura Press.

Murayama, K. (in press). Concept of motivation: From the perspective of expectation and value. In Y. Terasawa, A. Tanaka, & N. Kuroishi (Eds.), *Human motivation: Theoretical perspective*. Kyoto: Nakanishiya Press.

Murayama, K. (in press). Learning-performance distinction. In M. Kage (Eds.), *10 Principles human performance*. Tokyo: Kongo Press.

Murayama, K. (2015). Do you know what you know? Research on metacognition and metamemory. In S. Kitagami & H. Hayashi (Eds.), *Understand the mechanisms of mind: Recent advances in cognitive psychology* (pp. 45-56). Kyoto: Nakanishiya Press.

Murayama, K. (2013). Effects of teacher evaluation on students. In D. Sotobayashi, S. Tsuji, & K. Shimazu (Eds.), *Encyclopedia of Psychology*, Tokyo: Seishin Press.

- Murayama, K. (2012). Approach-avoidance motivation. In M. Kage (Eds.), *Introduction to human motivation* (pp. 37-65). Tokyo: Kongo Press.
- Murayama, K. (2011). Do Japanese students have lower academic motivation? Three myths about motivation. In T. Okubo & I. Maki (Eds.), *Educational psychology as a reflective practice* (pp. 27-40). Kyoto: Nakanishiya Press.
- Murayama, K. (2010). Cognition and motivation. In S. Ichikawa (Ed.), *Contemporary cognitive psychology: Development and education* (pp. 104-128). Tokyo: Kitaoji Press.
- Murayama, K. (2008). Measurement of metamemory. In H. Shimizu (Ed.), *Current directions in metamemory: Controlling and monitoring memory* (pp. 41-63). Tokyo: Kitaoji Press.
- Murayama, K. (2007). Evaluative comments and children's intrinsic motivation. In M. Nakaya (Ed.), *Social relationships to facilitate motivation to learn*. Tokyo: Kaneko Press.
- Murayama, K. (2007). Learning strategy and self-regulated learning. In T. Fujita (Ed.), *Educational psychology in practical perspectives* (pp. 85-100). Tokyo: Minerva Press.
- Murayama, K. (2006). Hierarchical linear modeling with HLM and MLwiN. In Onodera, T. (Trans.), *Introducing multilevel modeling* (pp. 119-166). Kyoto: Nakanishiya Press.
- Murayama, K. (2006). Neural basis of emotion. In H. Kitamura & H. Kimura (Eds.), *Advances in research on emotion* (pp. 67-92). Kyoto: Nakanishiya Press.
- Murayama, K. (2006). Test format and learning strategy. In C. Tatsuno, T. Ishida, & T. Kitao (Eds.), *Encyclopedia of educational evaluation* (p 548). Tokyo: Tosho-Bunka Press.
- Murayama, K. (2006). Educational evaluation. In Kage, M. (Ed.), *Asakura series in psychology: Educational psychology* (pp. 173-194). Tokyo: Asakura Press.
- Murayama, K. (2006). What do the results of PISA mean?: Importance of "assessment literacy". In Center for Research of Core Academic Competences (Ed.), *Japanese key competence: Crisis and perspectives* (pp. 70-91). Tokyo: Akashi Press.
- Murayama, K. (2005). Motivational theories and educational practice in higher education. In S. Mizokami & T. Fujita (Eds.), *Psychology and higher education* (pp. 115-119). Kyoto: Nakanishiya Press.
- Murayama, K. (2002). Goal, goal structure, and motivation. In M. Nasu (Ed.), *Practical points to set evaluation standard* (pp. 50-53). Tokyo: Education Development Institute

## Translation

- Kreft, I., & De Leeuw, J. (1998). *Introducing multilevel modeling*. London: Sage. (Translated in 2006, with Onodera, T., Iwata, N. Hishimura, Y. Hasegawa, K.).

## Research Institution Invited Talks

2018

University of Southampton

2017

University of Pittsburgh

2016

National Institute of Information and Communication Technology

Tokyo Metropolitan Institute of Medical Science

University of Oxford

University of Tübingen

2015

Goldsmiths, University of London

University of Geneva

University of Bristol

University of Munich

2014

University of Lausanne  
University of Tromsø  
University of York

2013

Columbia University  
University College London  
University of California, Irvine  
University of California, San Francisco

2012

University of Reading  
University of Tübingen  
University of Ghent  
Korea University  
Doshisha University

2011

University of Oxford  
University of Southampton  
University of Southern California  
University of Essex  
University College London  
University of California, Los Angeles

2010

University of Tübingen  
University of Hamburg

### International Symposium Presentations

Murayama, K. (2016). *Curiosity as a complementary reward for extrinsic incentives*. In T. Gliga, P. Oudeyer, J. Gottlieb, & M. Lopes (Organizers) *Neurocuriosity 2016*. Workshop held at the University College London.

Sticca, F., Goetz, T., Pekrun, R., Murayama, K., & Elliot, A. J. (2016). *Achievement goals as antecedents of students' discrete achievement emotions: An inter- and intra- individual approach across four academic domains*. In C. Grunschel & U. Nett (Organizers), *Emotional and Motivational Processes in Contexts of Self-Regulated Learning: Experience Sampling Approaches* Symposium conducted at the 15th International Conference on Motivation, Thessaloniki, Greece.

Fastrich, G. & Murayama, K. (2016). *Creative a trivia question data base: How interest shapes our memory performance*. In M. Knogler & A. Gegenfurtner (Organizers), *An interest theory perspective on learning: What is in for the effective design of learning environments?* Symposium conducted at the 15th International Conference on Motivation, Thessaloniki, Greece.

Murayama, K. (2016). *The interactive effects of extrinsic rewards and interest on memory*. In M. Gruber (Organiser), *Neuromodulatory effects on episodic memory*. Symposium conducted at the 5th International Conference on Memory, Budapest, Hungary.

Murayama, K. (2015). *Time-specific random effect and Type-1 error inflation in longitudinal intraindividual data analysis: A mixed-effects model perspective*. In L. Malmberg (Organiser), *Network on Intrapersonal Research in Education (NIRE) Seminar Series 3*. Workshop held at the University of Helsinki.

Murayama, K. (2015). *Within-person approach: What is it and why is it so important?* In K. Murayama (Organiser), *How a within-person analysis contributes to the deeper understanding of students' motivation and learning?* Invited Symposium conducted at

- British Psychology Society (BPS) Psychology of Education Conference, Liverpool.
- Murayama, K. (2014). *Neural correlates of personal choice: Is there a common basis?* In K. Savani (Chair), *Beyond motivation and well-being: Influence of choice on neural processing, attention, cognition, and decision making*. Symposium conducted at the 27th APS Annual Convention, New York.
- Murayama, K. (2014). *A multimethod approach to intrinsic interest*. In K. Murayama (Chair), Critical roles of interest in education: *Theoretical and empirical advances*. Invited symposium conducted at the 2014 IMBES Conference, Fort Worth.
- Murayama, K. (2014). *Critical roles of motivation in learning: A multimethod approach*. Richard E. Snow Award for Early Contributions Recipient Talk at the 2014 APA Annual Convention, Washington DC.
- Murayama, K. (2014). *Future directions: A multimethod approach to achievement goals*. In M. Crouzevialle & A. Smeding (Chairs), *Achievement goals: New proposals for future research*. Symposium conducted at the 17th General Meeting of the European Association of Social Psychology, Amsterdam.
- Murayama, K. (2014). *Discussion*. In L. Fryer (Chair), *Goals, goals, goals: Social, instrumental and daily-life perspectives*. Symposium conducted at the 14th International Conference on Motivation, Helsinki.
- Murayama, K. (2014). *Discussion*. In K. A. Renninger & S. Hidi (Chairs), *Current approaches to interest measurement*. Symposium conducted at the AERA Annual Meeting and Exhibition, Philadelphia.
- Murayama, K. (2013). *How self-determination theory and neuroscience inform each other?* Invited speech at the 5th International Conference on Self-determination Theory, Rochester.
- Murayama, K. (2013). *Understanding intrinsic motivation by integrating educational and neuroscientific approaches*. In M. H. Immordino-Young (Chair), *Inspired!: Neuroscientific, psychological and educational research perspectives on promoting optimal learning states in urban schools*. Invited Presidential Symposium conducted at the AERA Annual Meeting and Exhibition, San Francisco.
- Murayama, K. (2013). *The commonality and diversity views on motivation: Accommodating neuroscientific and psychological perspectives*. In J. A. Christodoulou & M. H. Immordino-Young (Chairs), *Innovations in Education Neuroscience*. Symposium conducted at the AERA Annual Meeting and Exhibition, San Francisco.
- Kovas, Y., Plomin, R., Garon-Carrier, G., Boivin, M., Malykh, S. B., Spinath, F., Murayama, K., & Petrill, S. A. (2013). *Why do children differ in motivation to learn? Insights from a large twin study*. Symposium conducted at the 14th Annual Conference of the International Society for Intelligence Research, Melbourne.
- Murayama, K. (2011). *Multiple perspectives on the separation of performance-approach and performance-avoidance goals: Multi-sample, response bias, within-person, and behavior genetics analyses*. In W. Law & K. Murayama (Chairs), *On the issue of the separation of performance-approach and performance-avoidance goals: Are they one goal or two goals?* Symposium conducted at the AERA annual meeting and exhibition, New Orleans.
- Murayama, K. (2010). *Monetary reward and intrinsic motivation: Neural correlates of the undermining effect*. Invited speech at the 2nd International Conference on Neuroeconomics and Neuromanagement, Hanzhou.
- Murayama, K. (2008). *Performance-approach goals and contextual moderation of classroom goal structures*. In A. J. Elliot & K. Murayama (Chairs), *Does competition benefit students? Performance-approach goals in broader context*. Symposium conducted at the AERA Annual Meeting and Exhibition, New York.
- Ichikawa, S., Seo, M., Murayama, K., & Uesaka, Y. (2005). *Development of componential assessment of mathematical competences (COMPASS): Conceptual basis, results, and application*. Paper presented at the 4th International Symposium of Center for Research of Core Academic Competences, United Nations University, Tokyo.

## Paper & Poster Presentations in International Conferences

- Fastrich, G. M., Suzuki, S., Christakou, A., & Murayama, K. (2017) *Preference for Challenge in Decision-Making*. Poster presented at the 58th Annual Meeting of the Psychonomic Society, Vancouver.
- Lau, J. K., Ozono, H., Komiya, A., & Murayama, K. (2017) *When the seductive power of curiosity overrides prospective risk- the underlying neural mechanism*. Poster presented at the 13th International conference for cognitive neuroscience, Amsterdam.
- Lau, J. K., Ozono, H., Komiya, A., & Murayama, K. (2017) *The seductive power of curiosity: When it overrides physical risk- an fMRI investigation*. Paper presented at the 23rd Annual Meeting of the Organization for Human Brain Mapping, Vancouver. (Winner of the Merit Abstract Award)
- Middlebrooks, C. D., Kerr, T. K., Murayama, K., & Castel, A. D. (2016). *Memory for important information: Test expectancy and variable practice*. Poster presented at the 57th Annual Meeting of the Psychonomic Society, Boston.
- Ikedda, K., Castel, A. D., Yue, C. L., Murayama, K. (2015). *Achievement goals affect metacognitive judgments*. Poster presented at the 56th Annual Meeting of the Psychonomic Society, Chicago.
- Middlebrooks, C. D., Kerr, T. K., Murayama, K., & Castel, A. D. (2015). *Memory and selectivity when short on time: The value in rushing*. Poster presented at the 56th Annual Meeting of the Psychonomic Society, Chicago.
- Fastrich, G., Kerr, T. K., Castel, A. D., & Murayama, K. (2015). *Establishing a trivia question database to examine how curiosity and interest influence memory*. Poster presented at the 56th Annual Meeting of the Psychonomic Society, Chicago.
- Lichtenfeld, S., Pekrun, R., Arens, K., Morin, A., Murayama, K., & Loderer, K. (2015). *Students at risk: How do their emotion and motivation in mathematics develop?* Poster presented at the 16th Biennial EARLI Conference for Research on Learning and Instruction, Limassol.
- Antonesei, A., Murayama, K., & McCabe, C. (2015). *How effective is emotion manipulation: a meta-analysis (preliminary results)*. Poster presented at the 2015 conference of the International Society for Reading Emotions, Geneva.
- Kawaguchi, J., Nakamura, H., & Murayama, K. (2015). *Remembering autobiographical memories with nostalgia: Its characteristics and the influence on moral judgement*. Poster presented at the 11th Annual Meeting of the Society for Applied Research in Memory and Cognition, Victoria.
- Sungkhasettee, V. W., Yan, V. X., Murayama, K., & Castel, A. D. (2014). *What important things did you learn last week? Selectivity differences between high- and low-achievers*. Poster presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach.
- McGillivray, S., Murayama, K., & Castel, A. D. (2014). *Interest and metacognitive judgments as predictors of long-term memory in older and younger adults*. Poster presented at the Cognitive Aging Conference 2014, Atlanta.
- Friedman, M. C., McGillivray, S., Murayama, K., & Castel, A. D. (2014). *Memory for common and critical medication side effects in younger and older adults*. Paper presented at the Cognitive Aging Conference 2014, Atlanta.
- Middlebrooks, C. D., McGillivray, S., Worden, K. M., Murayama, K., & Castel, A. D. (2014). *Aging and value-directed remembering for allergens and health foods*. Poster presented at the Cognitive Aging Conference 2014, Atlanta.
- Hamm, J. M., Perry, R. P., Chipperfield, J. G., Parker, P. C., Murayama, K., Weiner, B., & Leobe, L. C. (2014). *Facilitating adaptive explanatory thinking among vulnerable young adults using attributional retraining: Long-term effects on cognition, emotion, and performance*. Poster presented at the 15th Annual Meeting of the Society for Personality and Social Psychology, Austin.
- Murayama, K., Blake, A. B., & Castel, A. D. (2013). *Enough is enough: Metacognitive decision to continue or halt study*. Poster presented at the 54th Annual Meeting of the Psychonomic Society, Toronto.
- Yan, V. X., Murayama, K., & Castel, A. D. (2013). *The role of preference versus familiarity in*

- incidental and intentional learning*. Poster presented at the 54th Annual Meeting of the Psychonomic Society, Toronto.
- Kawaguchi, J., Nakamura, H., & Murayama, K. (2013). *How nostalgia influences moral judgment*. Poster presented at the 54th Annual Meeting of the Psychonomic Society, Toronto.
- Aoki, R., Matsumoto, M., Yomogida, Y., Izuma, K., Murayama, K., Sugiura, A., Camerer, C. F., Adolphs, R., & Matsumoto, K. (2013). *Increasing number of choice options and their social equality are represented by dissociable components of the human reward system*. Poster presented at the Neuro2013, Kyoto.
- Murayama, K. & Kitagami, S. (2012). *Consolidation power of money: Monetary cues enhance long-term memory for irrelevant past events*. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis.
- Murayama, K., Pekrun, R., Lichtenfeld, S., & vom Hofe, R. (2012). *Predicting long-term growth in adolescents' mathematics achievement: It is not how smart you are, but how motivated you are and how you study that is important*. Paper presented at the 13th International Conference on Motivation, Frankfurt.
- Matsumoto, K., Murayama, K., Matsumoto, M., Izuma, K., Sugiura, A., Deci, E., & Ryan, M. (2012). *Neural correlates of motivation and performance enhancement by self-determination*. Poster presented at the Neuro 2012, Nagoya.
- Aoki, R., Matsumoto, M., Yomogida, Y., Izuma, K., Murayama, K., Sugiura, A., Camerer, C. F., Adolphs, R., & Matsumoto, K. (2012). *Neural correlates of the reward value for number of choice options*. Paper presented at the 42nd Annual Meeting of the Society for Neuroscience, New Orleans.
- Sugiura, A., Murayama, K., Matsumoto, M., Izuma, K., Yomogida, Y., Aoki, R., Hasegawa, T., & Matsumoto, K. (2012). *Neural basis of persistence after failure associated with self-efficacy*. Poster presented at the Neuro 2012, Nagoya.
- Cada, J. S., Murayama, K., & Pekrun, R. (2012). *The influence of boredom on creativity*. Poster presented at the 30th International Congress of Psychology, Cape Town.
- Yamagata, S., Shikishima, C., Murayama, K., & Ando, J. (2012). *Gene-environment interactions in development of merits among Japanese middle-school students*. Poster presented at the 2012 Annual Meeting of the American Sociological Association, Colorado.
- Perry, R., Chipperfield, J., Pekrun, R., Chuchmach, L., Stewart, T., & Murayama, K. (2012). *Facilitating the transition from high school to college using a cognitive intervention: Longitudinal effects on cognition, emotion, motivation and performance*. Poster presented at the 2012 Hawaii International Conference on Education, Honolulu.
- Aoki, R., Matsumoto, M., Yomogida, Y., Izuma, K., Murayama, K., Sugiura, A., Camerer, C. F., Adolphs, R., & Matsumoto, K. (2012). *Reward value for number of choice options and its equality*. Poster presented at the Society for Neuroeconomics 2012 Annual Meeting, Miami.
- Aoki, R., Matsumoto, M., Yomogida, Y., Izuma, K., Murayama, K., Sugiura, A., Camerer, C. F., Adolphs, R., & Matsumoto, K. (2012). *Neural correlates of the reward value for number of choice options*. Poster presented at the 3rd Annual Meeting of the Society for Social Neuroscience, New Orleans.
- Murayama, K., & Kitagami, S. (2011). *Creating self-efficacy by changing perceptual fluency*. Poster presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle.
- Murayama, K. & Kuhbandner, C. (2011). *Money enhances memory consolidation – But only for boring material*. Poster presented at the 5th International Conference on Memory, York.
- Lee, B., Sakaki, M., Murayama, K., Maier, M., & Pekrun, R. (2011). *Acute stress response increases rejections in the Ultimatum Game*. Poster presented at the 32nd Annual Conference of the Society for Judgment and Decision Making, Seattle.
- Matsumoto, M., Murayama, K., Izuma, K., Elliot, A. J., & Matsumoto, K. (2011). *Neural basis of setting achievement goals and its effects on motivation*. Paper presented at the 41st Annual Meeting of the Society for Neuroscience, Washington DC.
- Matsumoto, M., Murayama, K., Izuma, K., Elliot, A. J., & Matsumoto, K. (2011). *Achievement goals and motivation: Neural basis of setting a goal standard*. Poster presented at the Neuroeconomics: Decision Making and the Brain, Evanston.

- Tanaka, A. & Murayama, K. (2011). *Individual differences in the intra-individual relationship between task specific perceptions and emotional engagement*. Paper presented at the AERA Annual Meeting and Exhibition, New Orleans.
- Lichtenfeld, S., Pekrun, R., Stupnisky, R. H., Reiss, K., & Murayama, K. (2011). *Student emotions in the early years: Development and validation of the Achievement Emotions Questionnaire-Elementary School (AEQ-E)*. Poster presented at the AERA Annual Meeting and Exhibition, New Orleans.
- Perry, R. P., Chipperfield, J. G., Pekrun, R., Chuchmach, L., Stewart, T. L., & Murayama, K. (2011). *Attributional retraining in achievement settings: Longitudinal effects of a motivation-enhancing treatment on cognition, emotion, and performance*. Poster presented at the 12th Annual Meeting of the Society for Personality and Social Psychology, San Antonio.
- Pekrun, R., Murayama, K., Frenzel, A. C., & Goetz, T. (2011). *Origins of achievement emotions: The impact of individual and class-level ability*. Paper presented at the 14th Biannual Conference of the European Association for Research on Learning and Instruction, Exeter
- Murayama, K., Matsumoto, M., Izuma, K. & Matsumoto (2010). *Extrinsic reward and intrinsic motivation: Neural correlates of the undermining effect*. Poster presented at the 40th Annual Meeting for Neuroscience, San Diego.
- Murayama, K., & Elliot, A. J. (2010). *Achievement goals and memory: Competition enhances immediate, but not long-term memory*. Poster presented at the 12th International Conference of Motivation, Porto
- Murayama, K., Matsumoto, M., Izuma, K. & Matsumoto (2010). *Neural correlates of the undermining effect*. Paper presented at the 3rd International conference on self-determination theory, Ghent.
- Murayama, K., Elliot, A. J., & Yamagata, S. (2010). *Separation of performance-approach and performance-avoidance goals: State level, state change level, intraindividual level, and genetic levelanalyses*. Poster presented at the 11th Annual Meeting of the Society for Personality and Social Psychology, Las Vegas.
- Murayama, K., Matsumoto, M., Izuma, K., Otake, Y., & Matsumoto, K. (2010). *Performance-contingent monetary reward decreases motivation: Neural correlates of undermining effect*. Poster presented at the Human Brain Mapping 2010, Barcelona.
- Matsumoto, M., Murayama, K., Matsumoto, M. & Izuma, K. (2010). *Neural basis of undermining intrinsic motivation by monetary rewards*. Poster presented at the Neuro 2010, Kobe.
- Izuma, K., Matsumoto, M., Murayama, K., Samejima, K., Sadato, N. & Matsumoto, K. (2010). *Neural correlates of cognitive dissonance and preference change in the free-choice paradigm*. Poster presented at the Neuro2010, Kobe.
- Matsumoto, K. Murayama, K., Matsumoto, M. & Izuma, K. (2010). *Monetary reward and intrinsic motivation: Neural basis of motivation crowding-out effect*. Poster presented at the Neuroeconomics: Decision Making and the Brain, Illinois.
- Izuma, K., Matsumoto, M., Murayama, K., Samejima, K., Sadato, N. & Matsumoto, K. (2010). *Neural correlates of cognitive dissonance and choice-induced preference change*. Poster presented at the Neuroeconomics: Decision Making and the Brain, Illinois.
- Murayama, K. (2009). *Distinguishing controlled from automatic processes in the affect misattribution procedure: An ROC curve approach*. Poster presented at the 10th Annual Meeting of the Society for Personality and Social Psychology, Tampa.
- Ando, J., Murayama, K., Yamagata, S., Shikishima, C., Takahashi, Y., Ozaki, K., & Nonaka, K. (2008). *How do high school students learn? : Genetics of academic performance, learning attitude, and school environment*. Paper presented at the 2008 Behavioral Genetics Association Conference, Louisville.
- Murayama, K. & Elliot, A. J. (2008). *How to test the dimensional structure of psychological constructs: A proposal for applying multi-trait multi-method analysis to survey data*. Poster presented at the 9th Annual Meeting of the Society for Personality and Social Psychology, Albuquerque.
- Zhou, M., & Murayama, K. (2007). *Achievement goals and regulatory focus: Independent or*

*interrelated constructs?* Poster presented at the 115th Annual APA Convention, San Francisco.

Murayama, K. (2007). *Inferring students' intrinsic motivation in the classroom: Paradoxical effect of long observation.* Poster presented at the 3rd International conference on self-determination theory, Toronto.

Zhou, M., Murayama, K., & Nesbit, J. (2007). *A cross-cultural examination of the psychometric properties of the achievement goal questionnaire.* Paper presented at the 2007 AERA Annual Meeting and Exhibition, Chicago.

Murayama, K. (2007). *Motivational impact on the quality, not the quantity, of memory: Achievement goals and remember-know judgments.* Poster presented at the 8th Annual Meeting of the Society for Personality and Social Psychology, Memphis.

Murayama, K. (2006). *School-level goals, student-level goals and motivation: Testing the goal matching model.* Paper presented at the 10th International Conference on Motivation, Landau.

Murayama, K. (2005). *Test format and memory: A mediational analysis.* Poster presented at the 6th Tsukuba International Conference on Memory, Tsukuba. Murayama, K. (2004). *Test format and learning strategy.* Poster presented at the 28th International Congress of Psychology, Beijing.

Murayama, K. (2004). *Does the cloze test always promote the superficial approach to learning?* Poster presented at the 6th Tsukuba International Conference on Memory, Tsukuba.

Terasawa, T., Yoshida, T., Maemoto, K., Murayama, K., Katsube, A., & Ohta, N. (2003). *Does five-minutes exercise in learning second-language words improve learner's lexical ability?* Poster presented at the 4th Tsukuba International Conference on Memory, Tsukuba.

Yoshida, T., Terasawa, T., Maemoto, K., Murayama, K., Katsube, A., & Ohta, N. (2003). *Examining the relation between subjective evaluation and objective performance of word test in long-lasting English words learning.* Poster presented at the 4th Tsukuba International Conference on Memory, Tsukuba.

#### Japanese Symposium Presentations

Murayama, K. (2014). *Critical roles of motivation in learning: A multimethod approach.* Award recipient speech at the 78th Annual Convention of Japanese Psychological Association, Doshisha University, Kyoto.

Murayama, K. (2014). *Discussion.* In K. Shigemasu & C. Shikishima (Chairs), *Recent advances in cognitive testing.* Symposium conducted at the 12th Annual Meeting of Japanese Association of Research on Testing, Teikyo University, Tokyo.

Murayama, K. (2008). *Neural correlates of achievement motivation.* Invited paper presented at the 2nd Workshop of Advances in Cognitive Neuroscience, National Institute of Physiological Sciences, Nagoya.

Murayama, K. (2008). *Confidence rating: Its significance and the application to the social cognition research.* In H. Shimizu (Chair), *Monitoring and control of memory.* Symposium conducted at the 72th Annual Convention of Japanese Psychological Association, Hokkaido University, Sapporo.

Murayama, K. (2008). *Goals, emotions, and memory.* In T. Inoue & K. Sato (Chairs), *Recent advances in daily cognition study: Motivation and memory.* Symposium conducted at the 72th Annual Convention of Japanese Psychological Association, Hokkaido University, Sapporo.

Murayama, K. (2008). *Discussion.* In M. Kage (Chair), *Interplay between cognition study and motivation study.* Symposium conducted at the 50th Annual Meeting of the Japanese Association of Educational Psychology, Tokyo Gakugei University, Tokyo.

Murayama, K. (2008). *Discussion.* In T. Mori (Chair), *Novel educational evaluation system that supports learning.* Symposium presented at the 50th Annual Meeting of the Japanese Association of Educational Psychology, Tokyo Gakugei University, Tokyo.



- Murayama, K. (2008). *Hierarchical Linear Modeling: A tool for capturing the individual and classroom differences*. In T. Mori (Chair), *Advanced statistical analyses for educational psychologists*. Symposium presented at the 50th Annual Meeting of the Japanese Association of Educational Psychology, Tokyo Gakugei University, Tokyo.
- Murayama, K. (2008). *Generalizability theory for performance assessment*. Presented at 3rd Workshop on Common Achievement Test Organization for Medical Schools, Ochanomizu, Tokyo.
- Murayama, K. (2006). *Recent advances in the construct of construct validity*. In T. Haebara (Chair), *Recent advances in the construct of validity and the methodology for testing it*. Symposium presented at the 7th Workshop of Japanese Association of Research on Testing, the University of Tokyo, Tokyo.
- Murayama, K. (2006). *First results from COMPASS*. In S. Ichikawa (Chair), *Development and utilization of COMPASS as an assessment tool for mathematical abilities*. Symposium presented at the 48th Annual Meeting of the Japanese Association of Educational Psychology, Okayama University, Okayama.
- Takahashi, A. & Murayama, K. (2006). *Collaboration between qualitative and quantitative methodologists: How is it possible?* In T. Mori (Chair), *Integration of quantitative and qualitative methodologies*. Symposium presented at the 48th Annual Meeting of the Japanese Association of Educational Psychology, Okayama University, Okayama.
- Murayama, K. (2006). *Discussion*. In T. Fujita (Chair), *Challenge of the psychologists for the class assessment*. Symposium presented at the 12th Forum of Higher Education, Kyoto University, Kyoto.
- Murayama, K. (2005). *"Informed assessment" to support students' learning*. In T. Mori (Chair), *New frontiers of educational assessment*. Symposium presented at the 47th Annual Meeting of the Japanese Association of Educational Psychology, Asai-gakuen University, Sapporo.
- Murayama, K. (2005). *Discussion*. In S. Mizokami (Chair), *Challenge of the psychologists for the introductory education*. Symposium presented at the 11th Forum of Higher Education, Kyoto University, Kyoto.
- Murayama, K. (2005). *Summary report of PISA and TIMSS. Japanese schools: Current states and the future*. Symposium presented at the 3rd Workshop of Center for Research of Core Academic Competences, the University of Tokyo, Tokyo.
- Murayama, K. (2004). *From changing a classroom to creating a classroom*. In T. Mori (Chair), *Recent advances in the educational intervention studies*. Symposium presented at the 46th Annual Meeting of the Japanese Association of Educational Psychology, Toyama University, Toyama.
- Murayama, K. (2004). *Discussion*. In T. Mori (Chair), *Practicing educational psychology in classrooms*. Symposium presented at the 46th Annual Meeting of the Japanese Association of Educational Psychology, Toyama University, Toyama.
- Murayama, K. (2004). *Perceived competition and academic performance*. In Y. Matsuoka (Chair), *Motivation in junior-high school children: Interaction between cognition and environment*. Symposium presented at the 13th Annual Meeting of Japanese Society of Personality Psychology, Waseda University, Tokyo.
- Murayama, K. (2004). *Motivation to give up from achievement goal theory perspective*. In T. Ando & K. Murayama (Chair), *Motivation to give up: How does the motivation theory explain negative phenomenon?* Symposium presented at the 15th Annual Convention of Japanese Society of Developmental Psychology, Shirayuri College, Tokyo.
- Murayama, K. (2003). *Success focus evaluation to facilitate the motivation*. In T. Mori (Chair), *Rethinking educational assessment*. Symposium presented at the 45th Annual Meeting of the Japanese Association of Educational Psychology, Osaka Kyoiku University, Osaka.
- Murayama, K. (2002). *Discussion*. In T. Mori (Chair), *Rethinking the meaning of learning*. Symposium presented at the 44th Annual Meeting of the Japanese Association of Educational Psychology, Kumamoto University, Kumamoto.

## Paper & Poster Presentations in Japanese Conferences

- Kitagami, S. & Murayama, K. (2012). *The consolidation power of money: Monetary rewards enhances long-lasting memory of irrelevant past events*. Paper presented at the 10th Annual Meeting of Japanese Society for Cognitive Psychology, Okayama University, Okayama.
- Kitagami, S. & Murayama, K. (2011). *Creating self-efficacy by perceptual fluency*. Paper presented at the 9th Annual Meeting of Japanese Society for Cognitive Psychology, Gakushuin University, Tokyo.
- Suzuki, M., Tanaka, E., Murayama, K., & Ichikawa, S. (2009). *Classification of efficient calculation problems and effects of direct and indirect instruction*. Poster presented at the 51th Annual Meeting of the Japanese Association of Educational Psychology, Shizuoka University, Shizuoka.
- Murayama, K. (2008). *Separation of automatic and controlled components in the affect misattribution procedure*. Paper presented at the 6th Annual Meeting of Japanese Society for Cognitive Psychology, Chiba University, Chiba. (Best presentation award).
- Murayama, K. (2008). *Assessing students' motivation through observation*. Poster presented at the 50th Annual Meeting of the Japanese Association of Educational Psychology, Tokyo Gakugei University, Tokyo.
- Murayama, K. & Ichikawa, S. (2008). *Assessing the validity of efficient calculation problems in COMPASS*. Paper presented at the 6th Annual Meeting of Japanese Association of Research on Testing, Seikei University, Tokyo.
- Murayama, K. (2008). *An interaction between personal achievement goals and classroom goal structures*. Poster presented at the 72th Annual Convention of Japanese Psychological Association, Hokkaido University, Sapporo.
- Sakaki, M. & Murayama, K. (2007). *Automatic and controlled causal attribution in achievement situations*. Poster presented at the 5th Annual Meeting of Japanese Society for Cognitive Psychology, Kyoto University, Kyoto.
- Murayama, K. & Ichikawa, S. (2006). *Validity of efficient calculation problems in COMPASS*. Poster presented at the 48th Annual Meeting of the Japanese Association of Educational Psychology, Okayama University, Okayama.
- Takahashi, A. & Murayama, K. (2006). *Factors facilitating the achievement in integrated learning: A qualitative and quantitative analyses*. Poster presented at the 48th Annual Meeting of the Japanese Association of Educational Psychology, Okayama University, Okayama.
- Murayama, K. (2006). *Effects of achievement goals on recollection and familiarity*. Poster presented at the 4th Annual Meeting of Japanese Society for Cognitive Psychology, Chukyo University, Nagoya.
- Murayama, K. (2005). *Why does cloze test facilitate rote learning?: A test of test-format scheme hypothesis*. Paper presented at the 3rd Annual Meeting of Japanese Association of Research on Testing, Waseda University, Tokyo.
- Murayama, K. (2005). *Cloze test and learning strategy use: An intervention study*. Poster presented at the 47th Annual Meeting of the Japanese Association of Educational Psychology, Asai-Gakuen University, Sapporo.
- Takahashi, A. & Murayama, K. (2005). *Factors facilitating the achievement in integrated learning: A correlational study*. Poster presented at the 47th Annual Meeting of the Japanese Association of Educational Psychology, Asai-Gakuen University, Hokkaido.
- Murayama, K. (2005). *Competition and performance: A model for approach-avoidance cancellation*. Poster presented at the 69th Annual Convention of Japanese Psychological Association, Keio University, Tokyo.
- Murayama, K. (2005). *Mechanism of test-expectancy effect: Moderational effects of test difficulty and strategy attribution*. Poster presented at the 3rd Annual Meeting of Japanese Society for Cognitive Psychology, Kanazawa University, Ishikawa.
- Murayama, K. (2004). *Does short answer test facilitate the use of rote-learning strategies?* Poster presented at the 46th Annual Meeting of the Japanese Association of Educational Psychology, Toyama University, Toyama.
- Murayama, K. (2004). *Is avoidance of help-seeking maladaptive?* Poster presented at the 68th

- Annual Convention of Japanese Psychological Association, Kansai University, Osaka.
- Murayama, K. (2003). *Test format and achievement: A mediational analysis*. Poster presented at the 45th Annual Meeting of the Japanese Association of Educational Psychology, Osaka-Kyoiku University, Osaka.
- Murayama, K. (2003). *Test of undifferentiated performance-goal hypothesis*. Poster presented at the 67th Annual Convention of Japanese Psychological Association, the University of Tokyo, Tokyo.
- Murayama, K. (2002). *Test format and learning strategy use*. Poster presented at the 44th Annual Meeting of the Japanese Association of Educational Psychology, Kumamoto University, Kumamoto.
- Murayama, K. (2002). *Learning strategy use and perceived utility*. Poster presented at the 66th Annual Convention of Japanese Psychological Association, Tsukuba University, Ibaraki.
- Murayama, K. (2001). *Effects of T-score evaluation on intrinsic motivation*. Poster presented at the 43th Annual Meeting of the Japanese Association of Educational Psychology, Aichi-Kyoiku University, Nagoya.

## Manuscript Reviewing

American Journal of Psychiatry  
 Archives of Scientific Psychology  
 Basic and Applied Social Psychology  
 Behavior & Information Technology  
 Behavior Research Methods  
 Brain and Cognition  
 Brain Structure and Function  
 British Journal of Educational Psychology  
 British Journal of Education, Society & Behavioral Science  
 Cerebral Cortex  
 Child Development Perspectives  
 Cognition  
 Cognitive, Affective, and Behavioral Neuroscience  
 Cognitive Science  
 Cognitive Studies  
 Contemporary Educational Psychology  
 Creative Education  
 Current Directions in Psychological Science  
 Developmental Psychology  
 Developmental Studies in Social Motivation  
 Education Research International  
 Educational Psychology  
 Educational Psychology Review  
 European Journal of Personality  
 European Journal of Psychological Assessment  
 European Journal of Psychology of Education  
 European Journal of Personality  
 European Journal of Social Psychology  
 Frontiers in Integrative Neuroscience  
 Frontiers in Neuroscience  
 International Journal of Psychology  
 Japanese Journal of Cognitive Psychology  
 Japanese Journal of Educational Psychology  
 Japanese Journal of Educational Technology  
 Japanese Journal of Psychology  
 Japanese Journal for Research on Testing

Japanese Journal of Social Psychology  
Japanese Psychological Research  
Japanese Psychological Review  
Journal of Adolescence  
Journal of Behavioral Decision Making  
Journal of Cognitive Neuroscience  
Journal of Educational Psychology  
Journal of Experimental Education  
Journal of Experimental Psychology: Applied  
Journal of Experimental Psychology: General  
Journal of Experimental Psychology: Learning, Memory, and Cognition  
Journal of Experimental Social Psychology  
Journal of Memory and Language  
Journal of Neuroscience  
Journal of Neuroscience, Psychology, and Economics  
Journal of Personality and Social Psychology  
Journal of Research in Personality  
Learning and Individual Differences  
Learning and Instruction  
Memory and Cognition  
Mind, Brain, and Education  
Motivation and Emotion  
Motivation Science  
Neuroimage  
NPJ Science of Learning  
Organizational Behavior and Human Decision Processes  
Perceptual and Motor Skills  
Personality and Social Psychology Bulletin  
PLOS ONE  
Psychological Bulletin  
Psychological Reports  
Psychological Review  
Psychological Science  
Psychology and Aging  
Psychophysiology  
Psychonomic Bulletin & Review  
Review of General Psychology  
Review of Psychology Frontier  
Royal Society Open Science  
Scandinavian Journal of Educational Research  
Scientific Reports  
Social and Personality Psychology Compass  
Social Psychology of Education  
Sport, Exercise, and Performance Psychology  
Studia Psychologica  
Trends in Cognitive Sciences

## **Professional Membership**

American Educational Research Association  
American Psychological Association  
European Association for Research on Learning and Instruction  
International Mind, Brain, and Education Society  
Psychonomic Society

Japanese Association of Educational Psychology

## Grant Reviewing

Medical Research Council (UK)

Wellcome Trust (UK)

Pegasus Marie Curie Fellowships (Belgium)

Netherlands Organisation for Scientific Research (NWO; Netherlands)

Swiss National Science Foundation (SNSF; Switzerland)

Tertiary Education Research Fund (National Institute of Education, Singapore)

Tertiary Fund (Office of Education Research; Singapore)

## External Examiners

University of Bristol

## Grant Support

2018-2021 Grant-in-Aid for Scientific Research B, Japanese Ministry of Education, Science, Sports, and Culture (PI: 90,000 GBP for the team)

2017-2022 Leverhulme Research Leadership Award (Sole PI: 1,000,000 GBP)

2017-2020 Leverhulme Trust Research Project Grant (Sole PI: 300,000 GBP)

2017-2018 F. J. McGuigan Early Career Prize (Sole PI: 25,000 USD)

2016-2021 Grant-in-Aid for Scientific Research on Innovative Areas, Japanese Ministry of Education, Science, Sports, and Culture (Co-PI: 900,000 GBP for the team)

2015-2018 Grant-in-Aid for Young Scientists A, the Japanese Ministry of Education, Science, Sports and Culture (Sole PI: about 130,000 GBP)

2015 Neurocreative research funds (Sole PI: about 7,600 GBP)

2014-2018 Marie Curie Career Integration Grant, European Commission (Sole PI: 100,000 EUR)

2014 Pump-priming Research Funds, University of Reading (Sole PI; 493.5 GBP)

2014, 2015 Research Travel Grant Award, University of Reading (500 GBP for each)

2014 King Abdul Aziz University Research Grant

2010-2012 Humboldt Research Fellowships for Postdoctoral Researchers (Sole PI: about 10,000 GBP)

2006-2008 Research Grant, Ministry of Education, Science, Sports and Culture, Grant-in-Aid for JSPS (Sole PI; 21,000 GBP)

2004-2005 Research Grant, Ministry of Education, Science, Sports and Culture, Grant-in-Aid for JSPS (Sole PI; 7,800 GBP)