# Zhe Wang, Ph.D.

Department of Educational Psychology School of Education and Human Development Texas A&M University Email: <u>zhe.wang@tamu.edu</u> Lab: <u>https://sites.google.com/view/bsidlabtamu</u>

### EDUCATION

2016.12	M.S. Statistics	Virginia Tech, USA
2013.05	Ph.D. Developmental and Biological Psychology	Virginia Tech, USA
2010.12	M.S. Developmental and Biological Psychology	Virginia Tech, USA
2008.06	B.S. Applied Psychology	Nankai University, China

# **PROFESSIONAL POSITIONS**

2022.08 – present	Assistant Professor, Department of Educational Psychology, Texas A&M University
2017.01 - 2022.07	Assistant Professor, Human Development & Family Sciences, Texas Tech
2013.07 – 2015.07	Postdoctoral Researcher, Department of Psychology, The Ohio State University
2008.08 - 2013.05	Teaching/Research Assistant, Department of Psychology, Virginia Tech

### HONORS/AWARDS

2021	Chancellor's Council Distinguished Research Award, College of Human Sciences
	Nominee, Texas Tech
2021	Outstanding Faculty Mentor Award, Center for Transformative Undergraduate
	Experiences, Texas Tech
2021	Professing Excellence Award, University Student Housing, Texas Tech
2020, 2017	Faculty Appreciation Award, Pi Beta Phi, Texas Tech
2020	Texas Tech Alumni Association New Faculty Award
2019	International Journal of Psychology Reviewer of the Year for 2018
2018	TTU Excellence in Research, Scholarship, and Creative Activity
2018	National Science Foundation CAREER Award
2017	Open Access Publication Initiative Funding, Texas Tech
2014	Pineapple Science Award, Zhejiang Provincial Science and Technology Museum &
	Guokr.com, China
2012	Chinese Government Award for Outstanding Self-Financed Students Abroad, Ministry of
	Education of the People's Republic of China
2011	The Galper Fund Awards, Psychology Department, Virginia Tech
2007	The National Scholarship, Ministry of Education of the People's Republic of China
2006	The First Prize of Excellent Undergraduate Scholarship, Nankai University
2005	The Second-Grade Scholarship, Nankai University

### **GRANT ACTIVITIES**

### **Externally Funded Projects**

- 2022 2027 **Co-I**. An integrative longitudinal analysis of neural rhythms in early development. *Eunice Kennedy Shriver National Institute of Child Health and Human Development* R01HD104945 (Co-PIs: M. A. Bell & K. Cuevas).
- 2018 2023 **PI**. Getting to the bottom of math anxiety: A longitudinal investigation into its developmental operating mechanisms. *National Science Foundation* CAREER Award #1750025.
- 2017 2021 Consultant. Child adjustment during family transition: Arrival of the second-born. US-Israel Binational Science Foundation Regular Research Grant #2016023 (Co-PIs: N. Atzaba-Poria & K. Deater-Deckard).

### **Internally Funded Projects**

2021–2022	<b>PI.</b> In and out of school behaviors of math anxious students (Mentee: Cha'Neil Bolden)
	TTU Center for Transformative Undergraduate Experiences Grant
2021–2022	PI. Sociocognitive factors that mediate the association between math anxiety and math
	achievement (Mentee: Jacob Evans)
	TTU Center for Transformative Undergraduate Experiences Grant
	TTU College of Human Sciences Undergraduate Research Experience Grant
2020–2021	PI. Attention patterns in math anxious children: An eye tracking study (Mentee: Sierra
	Shanafelt)
	TTU Center for Transformative Undergraduate Experiences Grant
	TTU College of Human Sciences Undergraduate Research Experience Grant
2019–2020	PI. Parental education related beliefs as mediators in the intergenerational transmission of
	mathematics achievement (Mentee: Jacob Evans)
	TTU College of Human Sciences Undergraduate Research Experience Grant.
2018–2019	PI. Emotion regulation of mathematics anxiety (Mentee: Jerra Miller)
	TTU College of Human Sciences Undergraduate Research Experience Grant.

### **Pending Projects**

- 2022 2027 **PI**. A longitudinal multi-method approach to understand the early development of math anxiety. *National Science Foundation* Fundamental Research Grant (Co-PI: N. Ravindran)
- 2022 2027 **PI.** How It All Starts: A Systematic Investigation of Math Anxiety Development in the First Three School Years. *Spencer Foundation* Large Research Grant (Co-PI: N. Ravindran)

### **Unfunded Projects**

- 2020 2023 **PI.** The mechanisms of early development in mathematics anxiety. *Jacobs Foundation* Early Career Research Fellowship.
- 2019 2022 **Co-PI**. Understanding and mitigating security risks to children in voice-controlled smart home environment. *National Science Foundation* EAGER (Co-PI: L. Cheng & H. Hu).
- 2019 2020 **Co-PI**. Studying the effect of learning chess on cognitive functions and brain functionality: Implications for mathematical skills and overall academic success. *Spencer Foundation* Small Research Grant (Co-PI: C. Kahathuduwa, A. Mastergeorge, & E. Trejos-Castillo).

- 2018 2019 **PI**. Regulating negative mathematics emotions. *TTU* Faculty Diversity Development Grant.
- 2017 2021 **Consultant**. Maternal stress and preterm development: Longitudinal influences of maternal distress, parent-infant relationship and maternal self-regulation *Israel Science Foundation* Individual Research Grant 1107/16. (PI: N. Atzaba-Poria).
- 2017 2018 **Co-I**. "Shared reality" and disillusionment in couple relationship. *TTU* Scholarship Catalyst Program (PI: S. Niehuis; Co-I: A. Reifman).
- 2017 2018 **PI.** Leveraging math learning research in the public education on science literacy. *The CH Foundation*.

### PUBLICATIONS

\* denotes undergraduate/graduate student authors;

<sup>#</sup> denotes publications for which I am the senior author. In this role, I mentored student authors and contributed **substantially** to the conceptualization, analyses, and writing of the study.

- Wang, Z., & Deater-Deckard. K. (in press). Resilience in gene-environment transactions. In S. Goldstein & R. Brooks (Eds.), *Handbook of resilience in children* (3rd ed.). Plenum.
- Li, T.\*, Quintero, M. \*, Galvan, M. \*, Shanafelt, S. \*, Hasty, L. M. \*, Spangler, D. P., Lyons, I. M., Mazzocco, M. M. M., Brockmole, J. R., Hart, S. A. & Wang, Z. # (2022). The mediating role of attention in the association between math anxiety and math performance: An eye-tracking study. *Journal of Educational Psychology*. <u>https://doi.org/10.1037/edu0000759</u>
- Li, T.\*, & Wang, Z. # (2022). Disaggregating the between-person and within-person associations between peer acceptance and academic achievement in early elementary school. *Journal of Applied Developmental Psychology, 78,* Article 101357. <u>https://doi.org/10.1016/j.appdev.2021.101357</u>
- Quintero, M.\*, Hasty, L.\*, Li, T.\*, Song, S.\*, & Wang, Z.# (2021). A multi-dimensional examination of math anxiety and engagement on math achievement. *British Journal of Educational Psychology*, Article e12482. <u>https://doi.org/10.1111/bjep.12482</u>
- Wang, Z., Borriello, G., Oh, W., Lukowski, S., & Malanchini, M. (2021). Co-development of math anxiety, math self-concept, and math value in adolescence: The roles of parents and math teachers. *Contemporary Educational Psychology, 67,* Article 102016. <u>https://doi.org/10.1016/j.cedpsych.2021.102016</u>
- Wang, Z., & Deater-Deckard, K. (2021). Gene-environment processes linking temperament and parenting.
  In K. J. Saudino & J. M., Ganiban (Eds.), *Behavior Genetics of Temperament and Personality,* Advances in Behavior Genetics (p.263-300). Springer. <u>http://doi.org/10.1007/978-1-0716-0933-0\_10</u>
- Hasty, L. M.\*, Malanchini, M., Shakeshaft, N., Schofield, K., Malanchini, M., & Wang, Z. <sup>#</sup> (2020). When anxiety becomes my propeller: Mental toughness moderates the relation between academic anxiety and academic effort. *British Journal of Educational Psychology*, *91*(1), 368-390. <u>https://doi.org/10.1111/bjep.12366</u>
- Malanchini, M., Rimfeld, K., Wang, Z., Petrill. S. A., Tucker-Drob, E., Plomin, R., & Kovas, Y. (2020).
  Genetic factors underlie the association between anxiety, motivation and performance in mathematics. *Translational Psychiatry*, *10*(12). <u>https://doi.org/10.1038/s41398-020-0711-3</u>
- Savla, J., Wang, Z., Zhu, J., Brossoie, N., Roberto, K. A., & Blieszner, R. (2020). Mastery and longevity in spousal caregivers of persons with dementia. *The Journals of Gerontology, Series B*, 75(7), 1558-

1562. <u>https://doi.org/10.1093/geronb/gbz028</u>

- Wang, Z., Oh, W., Malanchini, M., & Borriello, G. A. (2020). The developmental trajectories of mathematics anxiety: Cognitive, personality, and environmental correlates. *Contemporary Educational Psychology, 61,* Article 101876. <u>https://doi.org/10.1016/j.cedpsych.2020.101876</u>
- Wang, Z., Rimfeld, K., Shakeshaft, N., Schofield, K., & Malanchini, M. (2020). The longitudinal role of mathematics anxiety in mathematics development: Issues of gender differences and domain specificity. *Journal of Adolescence*, *80*, 220-232. <u>https://doi.org/10.1016/j.adolescence.2020.03.003</u>
- Lukowski, S. L., Ditrapani, J, B., Jeon, M., Wang, Z., Schenker, V. J., Doran, M. M., Hart, S. A., Mazzocco, M. M. M., Willcutt, E. G., Thompson, L. A., & Petrill, S. A. (2019). Multidimensionality in the measurement of mathematical anxiety and its relationship with mathematical skills. *Learning and Individual Differences, 70*, 228-235. <u>https://doi.org/10.1016/j.lindif.2016.07.007</u>
- Wang, Z., Shakeshaft, N., Schofield, K., & Malanchini, M. (2018). Anxiety is not enough to drive me away: A latent profile analysis on math anxiety and math motivation. *PLoS ONE*, *13*(2), e0192072. <u>https://doi.org/10.1371/journal.pone.0192072</u>
- Malanchini, M.<sup>†</sup>, Wang, Z.<sup>†</sup>, Voronin, I., Schenker, V., Petrill, S. A., Plomin, R., & Kovas, Y. (2017). Reading self-perceived ability, enjoyment and achievement: A genetically informative study of their reciprocal links over time. *Developmental Psychology*, *53*(4), 698-712. <u>http://dx.doi.org/10.1037/dev0000209</u> <sup>†</sup> denotes co-first authorship
- Wang, Z., Soden, B., Deater-Deckard, K., Lukowski, S., Schenker, V., Willcutt, E., Thompson, L., & Petrill, S. A. (2017). Development in reading and math in children from different SES backgrounds: The moderating role of child temperament. *Developmental Science*, 20(3), e12380. <u>https://doi.org/10.1111/desc.12380</u>
- Savla, J., Wang, Z., Roberto, K. A., & Blieszner, R. (2016). Deficit awareness in persons with mild cognitive impairment and family care partners. *Families, Systems, and Health, 34*(4), 429-434. <u>https://doi.org/10.1037/fsh0000230</u>
- Wang, Z., Deater-Deckard, K., & Bell, M. A. (2016). The role of negative affect and physiology in maternal attribution. *Parenting: Science and Practice*, 16(3), 206-218. <u>https://doi.org/10.1080/15295192.2016.1158604</u>
- Wang, Z., Lukowski, S., Hart, S. A., Lyons, I. M., Thompson, L. A., Kovas, Y., Mazzocco, M. M., Plomin, R., & Petrill, S. A. (2015). Is mathematical anxiety always bad for math learning? The role of math motivation. *Psychological Science*, *26*(12), 1863-1876. <u>https://doi.org/10.1177/0956797615602471</u>
- Cuevas, K., Deater-Deckard, K., Kim-Spoon, J., **Wang, Z.**, Morasch, K. C., & Bell, M. A. (2014). A longitudinal intergenerational analysis of executive functions during early childhood. *British Journal of Developmental Psychology, 32*, 50-64. <u>https://doi.org/10.1111/bjdp.12021</u>
- Wang, Z., Hart, S. A., Kovas, Y., Lukowski, S., Soden, B., Thompson, L. A., Plomin, R., McLoughlin, G., Bartlett, C. W., Lyons, I. M., & Petrill, S. A. (2014). Who's afraid of math? Two sources of genetic risk for mathematical anxiety. *Journal of Child Psychology and Psychiatry*, 55(9), 1056-1064. <u>https://doi.org/10.1111/jcpp.12224</u>
- Berry, D., Deater-Deckard, K., McCartney, K., Wang, Z., & Petrill, S. A. (2013). Gene-environment interaction between dopamine receptor DRD4 7-repeat polymorphism and early maternal sensitivity predicts inattention trajectories across middle childhood. *Development and Psychopathology*, 25(2), 291-306. <u>https://doi.org/10.1017/S095457941200106X</u>

- Deater-Deckard, K., & **Wang, Z.** (2013). Anger. In D. S. Dunn (Ed.), *Oxford Bibliographies in Psychology.* Oxford University Press. <u>http://www.oxfordbibliographies.com/view/document/obo-</u> 9780199828340/obo-9780199828340-0016.xml
- Wang, Z., Chen, N., Petrill, S. A., & Deater-Deckard, K. (2013). Observed personality in childhood: Psychometric and behavioral genetic evidence of two broad personality factors. *European Journal* of Personality, 27(1), 96-105. <u>https://doi.org/10.1002/per.1886</u>
- Wang, Z., & Deater-Deckard. K. (2013). Resilience in gene-environment transactions. In S. Goldstein & R. Brooks (Eds.), *Handbook of resilience in children* (2<sup>nd</sup> ed., p. 57-72). Plenum.
- Wang, Z., Deater-Deckard, K., & Bell, M. A. (2013). Household chaos moderates the link between maternal attribution bias and parenting. *Parenting: Science and Practice, 13*(4), 233-252. <u>https://doi.org/10.1080/15295192.2013.832569</u>
- Deater-Deckard, K., Chen, N., Wang, Z., & Bell, M. A. (2012). SES moderates the link between household chaos and maternal executive function. *Journal of Family Psychology*, 26(3), 391-399. <u>http://dx.doi.org/0.1037/a0028331</u>
- Deater-Deckard, K., **Wang, Z.**, Chen, N., & Bell, M. A. (2012). Maternal executive function, harsh parenting, and child conduct problems. *Journal of Child Psychology and Psychiatry,* 53(10), 1084-1091. <u>https://doi.org/10.1111/j.1469-7610.2012.02582.x</u>
- Deater-Deckard, K., & **Wang, Z.** (2012). Anger and irritability. In M. Zentner & R. L. Shiner (Eds.), *Handbook of Temperament* (p. 124-144). Guilford.
- Deater-Deckard, K., & **Wang, Z.** (2012). Development of temperament and attention: Behavioral genetic approaches. In M. Posner (Ed.), *Cognitive neuroscience of attention* (2<sup>nd</sup> ed., p. 331-342). Guilford.
- Deater-Deckard, K., & **Wang, Z.** (2012). Gene-environment interplay in adolescent relationships. In B. Laursen & W. A. Collins (Eds.), *Relationship pathways: From adolescence to young adulthood* (p. 237-256). Sage.
- Wang, Z., Deater-Deckard, K., Cutting, L., Thompson, L. A., & Petrill, S. A. (2012). Working memory and parent-rated components of attention in middle-childhood: A behavioral genetic study. *Behavior Genetics*, 42(2), 199-208. <u>https://doi.org/10.1007/s10519-011-9508-8</u>
- Wang, Z., Deater-Deckard, K., Petrill, S. A., & Thompson, L. A. (2012). Externalizing problems, attention regulation, and household chaos: A longitudinal behavioral genetic study. *Development and Psychopathology, 24,* 755-769. <u>https://doi.org/10.1017/S0954579412000351</u>
- Deater-Deckard, K., Beekman, C., Wang, Z., Kim, J. E., Petrill, S. A., Thompson, L. A., & DeThorne, L. S. (2010). Approach/positive anticipation, frustration/anger, and overt aggression in childhood. *Journal* of *Personality*, 78(3), 991-1010. <u>https://doi.org/10.1111/j.1467-6494.2010.00640.x</u>

### Manuscripts under Review/In Prep

- Quintero, M.\*, & **Wang, Z.** <sup>#</sup> (revise & resubmit). Achievement trajectories in academically at-risk students as a function of perceived classroom goal structure and socioeconomic backgrounds.
- Kim, Y.\*, Li, T.\*, Kim, H., Oh, W., & **Wang, Z.**<sup>#</sup> (under review). Socioeconomic status and school adjustment trajectories across childhood: The mediating role of parental involvement.
- Hasty, L.\*, Quintero, M. \*, Li, T. \*, Song, S. \*, & **Wang, Z.**<sup>#</sup> (under review). The longitudinal association among student externalizing behavior problems, teacher-student relationships, and classroom engagement.

- Song, S.\*, Li, T.\*, Quintero, M.\*, & **Wang, Z.**<sup>#</sup> (under review). The link between math anxiety and math achievement: The role of afterschool learning.
- Song, S. \*, Martin, M., & **Wang, Z.**<sup>#</sup> (under review). Racial-ethnic identity predicting school belonging trajectories in minority youth.
- Song, S.\*, Oh, W., Li, T.\*, **Wang, Z.**, & Niehuis, S. (under review). Trajectories of maternal and paternal coparenting from ages 1 to 9 and adolescence adjustment: A family systems approach.
- Li, T.,\*, Merrin, G. J., Quintero, M.\*, Song, S.\*, Hasty, L.\*, Chaghani, A.\*, & **Wang, Z.**<sup>#</sup> (in prep). Longitudinal multilevel analyses in understanding the effects of teacher-student relationship and peer relationship on elementary school students' classroom engagement.
- Malanchini, M., Voronin, I., Rimfeld, K., Wang, Z., Ritchie, S. J., Dale, P. S., Tucker-Drob, E. M., & Plomin,
  R. (in prep). Dissecting causal relations between cognitive ability and academic achievement
  through childhood and adolescence: The role of genes and environments.
- Rivas-Koehl, D.\*, Colwell, M., Sharp, E., & **Wang, Z.** (in prep). Investigative correlations of parent's gender beliefs, gender socialization beliefs, and gender information gathering.

### **CONFERENCE PRESENTATIONS**

### Symposium

- Savla, J., Wang, Z., Brossoie, N., Roberto, K. A., & Blieszner, R. (July, 2017). Early predictors of mortality among family caregivers of persons with dementia. Paper in symposium *Caring with grit and grace: Long-term family caregivers of persons with dementia* (J. Savla & K. A. Roberto Chairs). The 21<sup>st</sup> IAGG World Congress of Gerontology and Geriatrics, San Francisco, CA.
- Roberto, K. A., Weaver, R., Brossoie, N., Teaster, P., Savla, J., & **Wang, Z.** (Nov, 2016). Family perceptions of involuntary closure of health care facilities: Processes and outcomes. Gerontological Society of America Annual Meeting, New Orleans, Louisiana.
- Savla, J., Davey, A., Sands. L., & Wang, Z. (Nov, 2016). Typologies of formal and informal networks for older adults: A new look using NHATS data. Paper in symposium *Adult children and older parents*. The 69<sup>th</sup> Annual Scientific Meeting of the Gerontological Society of America Annual Meeting, New Orleans, Louisiana.
- Malanchini, M., **Wang, Z.**, Kovas, Y., & Plomin, P. (July, 2015). Mathematics motivation: Stability and change in its aetiology and its longitudinal association with mathematics achievement. The 14<sup>th</sup> European Congress of Psychology, Milan, Italy.
- Schenker, V. J., Wang, Z., Lukowski, S. L., Doran, M. M., & Petrill, S.A. (July, 2015). Nonshared environment influences the relationship between reading motivation and reading skills. Society for the Scientific Study of Reading Annual Meeting, The Big Island, Hawaii.
- Soden, B., Wang, Z., Malanchini, M., Kovas, Y., & Petrill, S. A. (March, 2015). Exploring the moderating effects of SES on reading and math achievement in middle childhood. Paper in symposium *Personenvironment interplay in academic and cognitive development* (Z. Wang Chair). Society for Research in Child Development Biennial Meeting, Philadelphia, PA.
- Wang, Z., Lukowski, S. L., Hart, S. A., Lyons, I. M., Thompson, L. A., Kovas, Y., Plomin, R., & Petrill, S. A. (March, 2015). Is mathematical anxiety always bad for math learning? Paper in symposium *Math anxiety and math cognition* (S. A. Petrill Chair). Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

- Wang, Z., Soden, B., Deater-Deckard, K., Lukowski, S., Schenker, V., Willcutt, E., Thompson, L. A., & Petrill, S. A. (March, 2015). Development in reading and math: The interplay between SES and child temperament. Paper in symposium *Person-environment interplay in academic and cognitive development* (Z. Wang Chair). Society for Research in Child Development Biennial Meeting, Philadelphia, PA.
- Malanchini, M., **Wang. Z.**, Kovas, Y. (March, 2015). The aetiology of the longitudinal relationship between academic motivation and achievement in reading and mathematics. Paper in symposium *Integrating insights into genetic, neurobiological and cognitive underpinnings of developmental disorders and traits* (C. U. Greven Chair). 2015 International Convention of Psychological Science, Amsterdam, the Netherlands.
- Wang, Z., Deater-Deckard, K., & Bell, M. A. (April, 2013). Do non-reactive mothers reappraise? Paper in symposium Understanding the role of parent executive function skills in family outcomes: The importance of a multiple levels of analysis approach (A. Monn Chair). Society for Research in Child Development Biennial Meeting, Seattle, WA.
- Wang, Z., Mullineaux, P., Deater-Deckard, K., Thompson, L. A., & Petrill, S. A. (March, 2011). Child adjustment and maternal negativity and positivity in middle childhood: Genotype-environment correlation processes. Paper in symposium *Parent-child relationships from infancy to young adulthood: The role of genes and environments* (K. Marceau, chair). Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.

### **Poster Presentations**

- Ameg, J. \*, Song, S. \*, & **Wang, Z.**<sup>#</sup> (Mar, 2022). Math anxiety, math achievement, and math extracurricular activities Poster, TTU Undergraduate Research Conference.
- Rushil, C.\*, Quintero, M.\*, & **Wang, Z.**<sup>#</sup> (Mar, 2022). Math anxiety and math achievement: The mediating role of math motivation. Poster, TTU Undergraduate Research Conference.
- Yang, J.\*, Hasty, L.\*, & Wang, Z.\* (Mar, 2022). The association between math gender stereotypes and math performance. Poster, TTU Undergraduate Research Conference.
   TTU URC 2022 LEDA Outstanding Presentation Award 1<sup>st</sup> place.
- Bolden, C.\*, Quintero, M.\*, & **Wang, Z.**<sup>#</sup> (Mar, 2022). Learning effort, extracurricular activity participation, and homework behaviors among students with math anxiety. Poster, Society for Research on Adolescence Biennial Meeting, New Orleans, LA.
- Evans, J.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (Mar, 2022). The sociocognitive mechanisms underlying the impairing effects of math anxiety on math learning. Poster, Society for Research on Adolescence Biennial Meeting, New Orleans, LA.
- Quintero, M.\*, Hasty, L.\*, Li, T.\*, Song, S.\*, & **Wang, Z.**<sup>#</sup> (Mar, 2022). The mediating role of math achievement on math motivation and parental involvement. Poster, Society for Research on Adolescence Biennial Meeting, New Orleans, LA.
- Davinson, K., Cuevas, K., Wang, Z., & Bell, M. A. (Nov, 2021) EEG theta-beta ratio during infancy: An integrative analysis of cross-context and cross-age stability. Poster, Annual Meeting of the International Society for Developmental Psychobiology. Chicago, IL.
- Reifman, A., Niehuis, S., **Wang, Z.**, Head, J., Wills, E., Luempert, A., ... Rivas-Koehl, M. (June, 2021). Not missing a beat: Cardiovascular dynamics in couples' shared reality discussions. Poster,

International Association for Relationships Research Biennial Conference. Virtual.

- Davinson, K., Cuevas, K., Wang, Z., & Bell, M. A. (March, 2021). Longitudinal and contextual analyses of resting-state multi-rhythm EEG measures during infancy. Eastern Psychological Association Annual Meeting. Virtual.
- Cuevas, K., **Wang, Z.**, & Bell, M. A. (April 2021). Integrative analysis of infant resting-state EEG. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Cuevas, K., **Wang, Z.**, Davison, K., & Bell, M. A. (April 2021). Longitudinal analysis of resting-state EEG theta-beta ratio during infancy. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Evans, J.\*, Li, T.\*, Hasty, L.\*, Quintero, M.\*, Jones, P.\*, & **Wang, Z.**<sup>#</sup> (April 2021). The mitigating effect of vagal suppression on the relation between math anxiety and math performance. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Hasty, L.\*, Quintero, M.\*, Li, T.\*, & **Wang, Z.**<sup>#</sup> (April 2021). The longitudinal association between student externalizing behaviors, teacher-student relationship, and classroom engagement. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Kim, Y.\*, Li, T.\*, Kim, H., Oh, W., & Wang, Z. # (April 2021). Socioeconomic status on school adjustment trajectories across childhood: The mediating role of parental involvement. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Li, T.\*, Hasty, L.\*, Quintero, M.\*, & **Wang, Z.**<sup>#</sup> (April 2021). The developmental associations between science anxiety and science achievement in middle to high school: A bivariate latent curve model with structural residuals. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Li, T.\*, Shanafelt, S.\*, Quintero, M.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (April 2021). The mediating role of attention: An eye tracking approach to understand the mechanism in the relation between math anxiety and math performance. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Quintero, M.\*, Hasty, L.\*, Li, T.\*, & **Wang, Z.**<sup>#</sup> (April 2021). The association between math anxiety and math engagement: A multi-dimensional examination. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Quintero, M.\*, Li, T.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (April 2021). The relationship between socioeconomic status and academic achievement trajectories: The moderating role of classroom goal structures. Poster, Society for Research in Child Development Biennial Meeting. Virtual.

### SRCD 2021 SECC Poster Competition Winner

- Shanafelt, S.\*, Li, T.\*, Quintero, M.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (April 2021). Attention patterns during math problem solving in math anxious children: An eye tracking study. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Song, S.\*, Oh, W., Niehuis, S., Li, T., Wang, Z., Garcia, M. G., & Campbell, M. (April 2021) Trajectories of maternal and paternal coparenting from ages 1 to 9 and adolescence adjustment. Poster, Society for Research in Child Development Biennial Meeting. Virtual.
- Bolden, C.\*, & **Wang, Z.**<sup>#</sup> (March, 2021). Interpreting the domain relevance within the intergenerational transmission of achievement. Poster, TTU Undergraduate Research Conference. Virtual.
- Evans, J.\*, Li, T.\*, Hasty, L.\*, Quintero, M.\*, Jones, P.\*, & **Wang, Z.**<sup>#</sup> (March, 2021) The mitigating effect of vagal suppression on the relation between math anxiety and math performance. Poster, TTU

Undergraduate Research Conference. Virtual.

# TTU URC 2021 Outstanding Presentation Competition 3<sup>rd</sup> place.

- Shanafelt, S.\*, Li, T.\*, Quintero, M.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (March, 2021). Disruption of attention processes in math anxious children during math problem solving. Poster, TTU Undergraduate Research Conference. Virtual.
- Street, M.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (March, 2021). Intergenerational transmission of math attitudes and emotions. Poster, TTU Undergraduate Research Conference. Virtual.
- Yang, J.\*, Quintero, M.\*, & **Wang, Z.**<sup>#</sup> (March, 2021). Mechanisms that contribute to change in math anxiety. Poster, TTU Undergraduate Research Conference. Virtual.
- Cuevas, K., **Wang, Z.**, Bell, M. A. (October, 2020). Resting-state EEG theta/beta ratio and executive function during infancy. Poster, International Society for Developmental Psychobiology Annual Meeting. Virtual.
- Oh, W., Li, T.\*, Song, S., & Wang, Z. (June, 2020). Identifying time-varying trajectories of coparenting and parenting stress: A longitudinal study from infancy to adolescence. Poster, International Society for the Study of Behavioural Development Biennial Meeting, Island of Rhodes, Greece. Not presented due to COVID-19.
- Galvan, M.\*, Li, T.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (April, 2020). The relation between math anxiety and math achievement: The mediation role of learning engagement. Roundtable, American Educational Research Association Annual Meeting, San Francisco, CA. Not presented due to COVID-19.
- Hasty, L.\*, Li, T.\*, Galvan, M.\*, & **Wang, Z.**<sup>#</sup> (April, 2020). The relation between math anxiety and math achievement: The moderating role of parental academic help. Poster, American Educational Research Association Annual Meeting, San Francisco, CA. Not presented due to COVID-19.
- Evans, J.\*, Hasty, L.\*, & **Wang, Z.**<sup>#</sup> (March 2020). Mechanisms underlying the multi-generational transmission of educational attainments: Exploring educational attitudes and emotions as mediators. Poster, Texas Council on Family Relations Annual Conference, Houston, TX.
- Quintero, M.\*, Li, T.\*, Hasty, L.\*, Tello, L.\*, & Wang, Z. # (March, 2020). Predicting individual differences in math achievement: A multi-dimensional approach. Poster, Society for Research on Adolescence Biennial Meeting, San Diego, CA. Not presented due to COVID-19.
- Hasty, L.\*, Hefele, J.\*, Li, T.\*, & **Wang, Z.**<sup>#</sup> (March, 2020). Association between parental beliefs and parental behaviors in regards to child education. Poster, Society for Research on Adolescence Biennial Meeting, San Diego, CA. Not presented due to COVID-19.
- Li, T. \*, Tello, L. \*, Hasty, L. \*, & **Wang, Z.** <sup>#</sup> (March, 2020). The relation between household chaos and academic achievement: The mediating role of executive function. Poster, Society for Research on Adolescence Biennial Meeting, San Diego, CA. Not presented due to COVID-19.
- Song, S., Li, T.\*, Oh, W., & Wang, Z. (March, 2020). District trajectories of coparenting and developmental outcomes: A longitudinal study from infancy to adolescence. Poster, Society for Research on Adolescence Biennial Meeting, San Diego, CA. Not presented due to COVID-19.
- Wang, Z., Li., T.\*, Hasty, L.\*, & Galvan, M.\* (March, 2020). The math anxiety and math achievement association: Mediated by learning engagement and moderated by parental academic monitoring. Poster, Society for Research on Adolescence Biennial Meeting, San Diego, CA. Not presented due to COVID-19.
- Li, T.\*, & Wang, Z. # (March, 2020). The dynamic relations between peer acceptance and academic

achievement in Elementary School. Poster, Graduate Student Research Conference, Lubbock, TX.

- Wang, Z., & Malanchini, M. (March, 2019). The developmental growth trajectories of mathematics anxiety: A latent growth mixture model analysis. Poster, Society for Research in Child Development Biennial Meeting, Baltimore, MD.
- **Wang, Z.**, & Malanchini, M. (May, 2018). When I feel in control, anxiety is my propeller. Poster, Association for Psychological Science Annual Convention, San Francisco, CA.
- Wang, Z., & Malanchini, M. (May, 2018) The longitudinal role of math anxiety in boys' and girls' mathematics development. Poster, Association for Psychological Science Annual Convention, San Francisco, CA.
- Miller, J.\*, & **Wang, Z.**<sup>#</sup> (March, 2018). The developmental relations among math anxiety, math avoidance, and mental toughness. Poster, 10<sup>th</sup> Annual TTU Undergraduate Research Conference, Lubbock, TX.
- Doran, M. M., Wang, Z., Lukowski, S., Schenker, V., & Petrill, S. A. (July, 2015). Genetic factors influence the concurrent and longitudinal relations between language and reading comprehension. Poster, Society for the Scientific Study of Reading Annual Meeting, The Big Island, Hawaii.
- Wang, Z., Lukowski, S., Doran, M., Schenker, V., & Petrill, S. (July, 2015). Cognitive processes in the relation between linguistic comprehension and reading comprehension. Poster, Society for the Scientific Study of Reading Annual Meeting, The Big Island, Hawaii.
- Doran, M., **Wang, Z.**, Malanchini, M., Lukowski, S., Schenker, V., Petrill, S. A. (March, 2015). An examination of the etiologies of the relations between reading motivation and reading-related constructs. Poster, Society for Research in Child Development Biennial Meeting, Philadelphia, PA.
- Schenker, V. J., Wang, Z., Lukowski, S. L., Soden, B., & Petrill, S. A. (March, 2015). A behavioral genetic approach to understanding the connection between reading motivation and reading outcomes in early adolescence. Poster, Society for Research in Child Development Biennial Meeting, Philadelphia, PA.
- Wang, Z., & Petrill, S. (July, 2014). The role of working memory in the links between behavioral problems and reading skills: A behavioral genetic study. Society for the Scientific Study of Reading Annual Meeting, Santa Fe, New Mexico.
- El Mallah, S., **Wang, Z.**, Petrill, S. A., Thompson, L. A., & Deater-Deckard, K. (June, 2013). Observed stability and plasticity: Links with Reading Achievement in Childhood. Association for Research in Personality Biennial Meeting, Charlotte, NC.
- Nguyen, C., & **Wang, Z.** (June, 2013). Can changes in academic achievement predict motivation? Association for Research in Personality Biennial Meeting, Charlotte, NC.
- **Wang, Z.**, Bell, M. A., & Deater-Deckard, K. (June, 2013). The role of negative affect and physiology in maternal attribution. Association for Research in Personality Biennial Meeting, Charlotte, NC.
- Wang, Z., Petrill, S. A., Thompson, L. A., & Deater-Deckard, K. (June, 2013). Genetic and nongenetic variance across the full range of individual differences in two broad personality factors. Association for Research in Personality Biennial Meeting, Charlotte, NC.
- Chen, N., **Wang, Z**., Bell, M. A., & Deater-Deckard, K. (April, 2013). Temperament and family environment transactions in the etiology of child behavior problems. Society for Research in Child Development Biennial Meeting, Seattle, WA.
- Wang, Z., Bell, M. A., & Deater-Deckard, K. (April, 2013). How do happy mothers parent: The role of

physiological regulation and family context. Society for Research in Child Development Biennial Meeting, Seattle, WA.

- El Mallah, S., **Wang, Z.**, Deater-Deckard, K., & Bell, M. A. (April, 2013). Vagal control predicts mother's reappraisal of emotion. Society for Research in Child Development Biennial Meeting, Seattle, WA.
- Chen, N., **Wang, Z.**, Bell, M. A., & Deater-Deckard, K. (May, 2012). Parenting and child maladjustment: Moderating effects of self-regulation and chaos. Poster, Association for Psychological Science Annual Convention, Chicago, IL.
- Deater-Deckard, K., Logan, J. A. R., **Wang, Z.**, Chen, N., & Petrill, S. (May, 2012). Heritability across the full range of individual differences in temperament. Poster, Association for Psychological Science Annual Convention, Chicago, IL.
- McClelland, E., **Wang, Z.**, Chen, N., Bell, M. A., & Deater-Deckard, K. (May, 2012). Parental attribution bias and behavior: The moderating effect of household chaos. Poster, Association for Psychological Science Annual Convention, Chicago, IL.
- Wang, Z., Chen, N., Bell, M. A., & Deater-Deckard, K. (May, 2012). Maternal attributes moderate the link between child difficult behaviors and harsh parenting. Poster, Association for Psychological Science Annual Convention, Chicago, IL.
- Chen, N., **Wang, Z.**, Deater-Deckard, K., & Power, A. (May, 2011). Do child-centered childrearing attitudes break the line between challenging child behaviors and harsh parenting? Poster, Association for Psychological Science Annual Convention, Washington, DC.
- Wang, Z., Chen, N., & Deater-Deckard, K. (May, 2011). Observed personality in childhood: Psychometric and behavioral genetic evidence for higher-order factors. Poster, Association for Psychological Science Annual Convention, Washington, DC.
- Beekman, C., Deater-Deckard, K., Wang, Z., & Bell, M. A. (March, 2011). Maternal self-regulation and harsh parenting: The role of executive attention and working memory. Poster, Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.
- Berry, D., Deater-Deckard, K., McCartney, K. A., Wang, Z., & Petrill, S. A. (March, 2011). Geneenvironment interaction between DRD4 7- repeat and maternal sensitivity predicts inattention trajectories in middle childhood. Poster, Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.
- Deater-Deckard, K., **Wang, Z.**, Kelinsky, L., & Bell, M. A. (March, 2011). Maternal self-regulation of negativity, and child conduct problems. Poster, Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.
- Kim, J. E., Deater-Deckard, K., & Wang, Z. (March, 2011). Anger/frustration, hyperactivity/impulsivity, and developmental change in aggression in middle childhood. Poster, presented at Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.
- Mullineaux, P., Deater-Deckard, K., Wang, Z., & Bell, M. A. (March, 2011). Maternal cognitive selfregulation and household chaos: Moderation by socioeconomic status. Poster, Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.
- Wang, Z., Deater-Deckard, K., & Kim, J. E. (March, 2011). The links between fear and aggression: Moderating effects of anger and hyperactivity-impulsivity in middle childhood. Poster, Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.
- Wang, Z., Deater-Deckard, K., Thompson, L. A., & Petrill, S. A. (March, 2011). A behavioral genetic study of

the links between working memory and attention networks in middle childhood. Poster, Society for Research in Child Development Biennial Meeting, Montreal, Quebec, Canada.

- Kim, J. E., Deater-Deckard, K., & Wang, Z. (March, 2010). Anger/frustration, Inattention, and Change in Internalizing and Externalizing problems. Poster, Society for Research on Adolescence Biennial Meeting, Philadelphia, PA.
- Mullineaux, P., Wang, Z., Kim, J. E., & Deater-Deckard, K. (March, 2010). The link between reading comprehension and inattention across middle childhood to adolescence. Poster, Society for Research on Adolescence Biennial Meeting, Philadelphia, PA.
- Wang, Z., Deater-Deckard, K., & Kim, J. E. (March, 2010). Attention and working memory moderate the links between negative affect and aggression. Poster, Society for Research on Adolescence Biennial Meeting, Philadelphia, PA.
- Wang, Z., Deater-Deckard, K., & Kim, J. E. (March, 2010). Fear, frustration/anger and changes in overt aggression in the transition to early adolescence. Poster, Society for Research on Adolescence Biennial Meeting, Philadelphia, PA.

### **INVITED TALK**

- 2022 "Understanding the phenomenon of math anxiety" Department of Educational Psychology, Texas A&M University
- 2022 "Understanding the phenomenon of math anxiety". Department of Educational Psychology & Learning Systems, Florida State University
- 2022 "Understanding the phenomenon of math anxiety". Department of Education and Human Development, Clemson University
- 2018 "Mathematics anxiety in mathematics learning". Faculty Research Club, Texas Tech University
- 2015 "Academic development: Quantitative modeling of gene-environment processes". Human Development and Family Studies, Texas Tech University
- 2014 "Leap the hurdle: Role of self-regulation in development". Department of Psychology, University of Kentucky
- 2014 "Reactive and regulatory affect in learning and achievement". Department of Psychology, The Ohio State University

# **TEACHING AND MENTORING**

### Courses Taught at TTU

Semester	Course name	Level	Delivery	Enrollment	Evaluation
			format		
2017 Spring	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	40	3.1
2017 Spring	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	65	3.7
2017 Fall	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	49	4.0
2017 Fall	HDFS 3390 Research Method	Undergrad	In-person	39	3.6
2018 Spring	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	75	4.3
2018 Spring	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	77	4.0
2018 Fall	HDFS 5349 Quantitative Methods I	Grad	In-person	5	4.8
2019 Spring	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	17	4.9
2019 Spring	HDFS 3324 Dynamics of Family Interaction	Undergrad	In-person	63	4.5

2019 Fall	HDFS 5349 Quantitative Methods I	Grad	In-person	11	4.6
2019 Fall	HDFS 2303 Life Span Human Development	Undergrad	In-person	100	4.5
2020 Spring	HDFS 3390 Research Method	Undergrad	In-person	32	4.3
			Online		
2020 Fall	HDFS 5349 Quantitative Methods I	Grad	In-person	8	4.1
2020 Fall	HDFS 2303 Life Span Human Development	Undergrad	Hybrid	90	4.7
2021 Spring	HDFS 3390 Research Method	Undergrad	Hybrid	42	4.4
2022 Spring	HDFS 2303 Life Span Human Development	Undergrad	In-person	89	4.7
2022 Spring	HDFS 2303 Life Span Human Development	Undergrad	In-person	88	4.6

*Note*. 1 = low, 5 = high for evaluation.

# Individual Studies Courses at TTU

HDFS 8000 Dissertation HDFS 7000 Graduate Research HDFS 5311 Problems in HDFS HDFS 4320 Research in HDFS HDFS 4000 Individual Study in HDFS Fall 2021 – Summer 2022 Summer 2019 – Summer 2022 Fall 2017 – Summer 2022 Fall 2017 – Spring 2020 Spring 2018 – Spring 2020

### **Student Committee**

Student name	Program	Degree	My role	Status
Miranda Cox	HDFS, TTU	M.S.	Member	Completed, Summer 2022
Ali Chaghani	HDFS, TTU	M.S.	Chair	Left Program, Spring 2022
Karen Esteves	GPIDEA, TTU	M.S.	Member	Completed, Spring 2021
Dane Rivas-Koehl	HDFS, TTU	M.S.	Member	Completed, Spring 2021
Blake West	HDFS, TTU	M.S.	Member	Left Program, Spring 2021
Seowon Song	HDFS, TTU	M.S.	Member	Completed, Spring 2020
Brooke Loftis	GPIDEA, TTU	M.S.	Member	Completed, Spring 2020
Leslie Hasty	HDFS, TTU	M.S.	Member	Completed, Spring 2019
Gabriella Garcia	HDFS, TTU	M.S.	Member	In progress
Amani Khan	Interior Design, TTU	Ph.D.	Member	In progress
Javari Fairclough	HDFS, TTU	Ph.D.	Member	In progress
Jessica Blume	HDFS, TTU	Ph.D.	Member	In progress
Michaela Quintero	HDFS, TTU	Ph.D.	Chair	In progress
Seowon Song	HDFS, TTU	Ph.D.	Co-Chair	In progress
Zach Salander	Psych Sciences, U of	Ph.D.	Member	In progress
	Massachusetts Amherst			
Tianyu Li	HDFS, TTU	Ph.D.	Chair	Completed, Summer 2022
Leslie Hasty	HDFS, TTU	Ph.D.	Member	Completed, Spring 2022

### PROFESSIONAL SERVICES

### Advisory Board Membership

2021-2026 The impact of time-pressure on math anxiety and math learning. *National Science Foundation* CAREER Award # 2041887 (PI: Ian Lyons, Georgetown University).

# **Grant Reviewer**

Israel Science Foundation ad-hoc reviewer (2017)

National Science Foundation ad-hoc reviewer (2021)

# **Journal Principal Reviewer Board**

Journal of Educational Psychology (2022 – present)

### **Journal Post-hoc Reviewer**

Annals of the New York Academy of Sciences • Applied Neuropsychology • Behavior Genetics • Biological Psychology • British Journal of Educational Psychology • Child Development • Child Development Perspective • Child Psychiatry and Human Development • Clinical Child and Family Review • Cognitive Development • Developmental Psychobiology • Developmental Psychology • Developmental Science • Development and Psychopathology • Early Childhood Research Quarterly • Educational Psychology Review • Educational Psychologists • Frontiers in Psychology • Infant Behavior and Development • Infant and Child Development • International Journal of Psychology • Journal of Abnormal Child Psychology • Journal of Child Psychology and Psychiatry • Journal of Educational Psychology • Journal of Family Psychology • Journal of Individual Differences • Journal of Youth and Adolescence • Journal of the American Academy of Child and Adolescent Psychiatry • Learning and Individual Differences • Parenting: Science & Practice • Pediatrics • Personality and Individual Differences • PLOS ONE • Psychological Science • Review of Educational Research • Social Development • Social Psychiatry and Psychiatry • Studies in Educational Evaluation • The Journal of Early Adolescence • Translational Psychiatry

### Department, College, & University at TTU

Fall 2021 – Spring 2022	College Faculty Council, TTU
Fall 2021 – Spring 2022	University Convocations Committee, TTU
Spring 2021 – Spring 2022	Graduate Scholarship Committee, TTU
Spring 2021	TTU Undergraduate Research Conference Reviewer, TTU
Fall 2020 – Spring 2022	College Research Committee, TTU
Fall 2020 – Spring 2022	Colloquium Series Committee (Chair), TTU
Fall 2019 – Spring 2020	Faculty & Graduate Student Event Committee (Co-chair), TTU
Fall 2019	Early Childhood Faculty Search Committee, TTU
Fall 2018 – Spring 2022	Methods Qualifying Exam Committee, TTU
Fall 2018 – Spring 2022	Graduate Admission Committee, TTU
Fall 2018	Adolescence Faculty Search Committee, TTU
Spring 2018 – Spring 2019	Brown Bag Committee (Chair), TTU
Fall 2017 – Spring 2019	Outreach and Engagement Committee, TTU
Fall 2017– Spring 2018	STEM CORE Research Committee, TTU
Spring 2017 – Spring 2018	Quantitative Initiative Committee, TTU

#### Department, College, & University at OSU

2014	Reviewer, The Denman Undergraduate Research Forum, OSU
2013	Reviewer, The Discovery Themes Inaugural Request for Proposals, OSU

#### **Outreach & Engagement**

Spring 2020	Center for the Integration of STEM Education & Research - Science of Learning
	Afterschool Club (@ six elementary schools) host
Spring 2020	Ramirez Elementary School Science Night - Science of Learning Activity Host
Spring 2019	"Engaging in the Community". Volunteer Center of Lubbock Brown Bag Series
Spring 2018 & 2019	Tech Savvy Behavioral Science Workshop Host

# **Professional Memberships**

2020-present	Society for Research on Adolescence
2019-present	American Educational Research Association
2010-present	Society for Research in Child Development
2010-present	Association for Psychological Science

### SELECTED MEDIA COVERAGE

- 2019 Mathematics anxiety creates issues in class, social situations, by The Daily Toreador
- 2015 Math Anxiety doesn't equal poor math performance, by Association for Psychological Science; Science Daily; Wokeji.com; Goldsmiths, University of London; Science & Technology
- 2014 Who's afraid of math? Study finds some genetic factors, by Science Daily; Medical Daily; CNN/ABC5/CBS46/FOX19; Xinhua.net, China; The British Psychological Society; The Times of India; Iran Daily; The Asian Age