

XIAORAN SUN

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ACADEMIC POSITIONS

- 12/2021 – Present Assistant Professor, Department of Family Social Science, College of Education and Human Development, University of Minnesota
Affiliate Faculty, Learning Informatics Lab, College of Education and Human Development
Affiliate Faculty, Data Science Initiative, College of Science and Engineering
- 09/2019 – 12/2021 Postdoctoral Scholar, Departments of Pediatrics & Communication, Stanford University
Postdoctoral Scholar, Stanford Data Science

EDUCATION

- 08/2019 Ph.D., Human Development and Family Studies, the Pennsylvania State University
Graduate Minor in Social Data Analytics
- 12/2016 M.S., Human Development and Family Studies, the Pennsylvania State University
- 07/2015 B.S., Psychology, Zhejiang University, Hangzhou, China

HONORS AND AWARDS

- 2021 – 2022 Microsoft Azure Computing Award, Stanford Data Science
- 2020 – 2021 Scholarship, Stanford Data Science Scholars Program
- 2017 – 2018 Traineeship, Integrative Graduate Education and Research Training – Big Data Social Science (BDSS-IGERT) Training Program, National Science Foundation (Grant DGE-1144860)
- 2015 – 2016 University Graduate Fellowship, The Pennsylvania State University
- 2015 – 2019 Morningside Cultural China Scholarship for Alumni Studying Abroad, Zhejiang University
- 2014 Li & Fung Scholarship, University of Hong Kong
- 2013 Outstanding Undergraduate Scholarship (First-class), Zhejiang University
- 2012 National Academic Scholarship, Ministry of Education of P. R. China

RESEARCH GRANTS

Grants Funded

- 07/2022 – 07/2024 **Grant-in-Aid of Research, Artistry and Scholarship**, University of Minnesota
PI: **Xiaoran Sun, Ph.D.**
Title: “Examining teenagers’ overnight smartphone use and its implications for well-being with high-intensity smartphone data”
Amount: \$34,400
- 01/2021 – 12/2021 **Postdoctoral Support Grant**, Maternal and Child Health Research Institute, School of Medicine, Stanford University
PI: **Xiaoran Sun, Ph.D.**
Title: “Examining implications of parent-adolescent digital communication for their relationship quality and adolescent mental health” (The Family Screenome Project)
Amount: \$80,000 (\$40,000 received due to other awards)

Grants Under Review

- 12/2022 **Small Research Grants Program**, Spencer Foundation
PI: Xiaoran Sun, Ph.D.
Title: “Using Machine Learning and Large-Scale Longitudinal Data to Identify Key Adolescent Social Determinants of Educational Attainment in White, Black, and Latinx adults”
Amount requested: \$50,000

10/2022 **Pipeline Grants Competition**, Russell Sage Foundation
 PI: Xiaoran Sun, Ph.D.
 Title: “Identifying key adolescent social determinants of socioeconomic attainment in White, Black, and Latinx adults: A data-based, cross-study synthesis using machine learning”
 Amount requested: \$30,000

Grants Not Funded

11/2022 **Foundational Integrity and Social Impact Research**, Meta Foundation
 PI: Xiaoran Sun, Ph.D.
 Title: “Teen social media use at night: Objective patterns and links to well-being”

04/2022 **P50 MH125795**, National Institute of Health
 PI: Gerald J. August, Ph.D.
 Title: “Evaluation of a machine-learning based clinical decision support system for guiding treatment decisions for adolescent depression”
 Role: Co-I for the Digital Phenotyping project; Member of the Digital Technology team in the Methods Core

02/2020 **Small Grants Program for Early Career Scholars**, Society for Research in Child Development
 PI: Xiaoran Sun, Ph.D.
 Title: “Protect me, constrain me: Examining parent-adolescent digital interactions and the implications for adolescent well-being”

10/2019 **Dean’s Fellowship**, Stanford School of Medicine
 PI: Xiaoran Sun, Ph.D.
 Title: “The Family Screenome Project: How do adolescents and parents interact via smartphones?”

SCHOLARLY PUBLICATIONS

Manuscripts in Press & Published

17. Dworkin, J., **Sun, X.**, LeBouef, S., & Keyzers, A. (2022) Associations among parent technology use, locus of control, and child problem behaviors. *Family Relations*, [online first]. <https://doi.org/10.1111/fare.12811>
16. **Sun, X.**, Haydel, F., Matheson, D., Desai, M., & Robinson, T. N. (2022). Are mobile phone ownership and age of acquisition associated with child adjustment? A 5-year prospective study among low-income Latinx children. *Child Development*, [online first]. <https://doi.org/10.1111/cdev.13851> (Media mentions: [Stanford Medicine News](#), [CTV News](#), [Inc. Magazine](#), [Futurity](#), [CNN Indonesia](#), [The Good Men Project](#), [Gigazine \[in Japanese\]](#), [Before It's News](#), [reason](#))
15. **Sun, X.**, Ram, N., Reeves, B., Cho, M. J., Fitzgerald, A., Yang, X., & Robinson, T. N., (2022). Connectedness and independence of young adults and parents in the digital world: Observing smartphone interactions at multiple timescales using Screenomics. *Journal of Social and Personal Relationships*, [online first]. <https://doi.org/10.1177/02654075221104268>
14. Padilla, J., **Sun, X.**, McHale, S. M., & Updegraff, K. A. (2022). Longitudinal links between adolescent siblings’ gender-typed characteristics and sibling relationship quality: A dyadic approach. *Current Psychology*, [online first]. <https://doi.org/10.1007/s12144-022-02919-0>
13. **Sun, X.**,* Updegraff, K. A.,* McHale, S. M., Hochgraf, A. K., Gallagher, A. M., & Umaña-Taylor, A. J. (2021). Implications of COVID-19 school closures for sibling dynamics among Latinx children in the U.S.: A

prospective, daily diary study. *Developmental Psychology*, 57, 1708-1718. (*Equal contributions) (Media mentions: [Penn State News](#))

12. Sun, X., McHale, S. M., Updegraff, K. A., & Umaña-Taylor, A. J. (2021). Implications of Mexican-origin youth's work experiences for relationships with fathers. *Cultural Diversity and Ethnic Minority Psychology*, 27, 796-807
11. Skinner, O. D., Sun, X., & McHale, S. M. (2021). Links between marital and parent-child relationship in African American families: A dyadic approach. *Journal of Family Psychology*, 35, 1086-1096.
10. Sun, X., McHale, S. M., & Updegraff, K. A. (2020). Career adaptivity mediates longitudinal links between parent-adolescent relationships and young adult occupational attainment. *Developmental Psychology*, 56, 2309-2321
9. Sun, X., Ram, N., & McHale, S. M. (2020). Adolescent family experiences predict young adult educational attainment: A data-based cross-study synthesis with machine learning. *Journal of Child and Family Studies*, 29, 2770-2785.
8. Sun, X., McHale, S. M., & Crouter, A. C. (2020). Perceived underemployment and couple relationships among African American parents: A dyadic approach. *Cultural Diversity and Ethnic Minority Psychology*, 26, 82-92. (Media mentions: [APA spotlight](#), [Penn State News](#))
7. Skinner, O. D., Sun, X., & McHale, S. M. (2020). Longitudinal links between expressivity and African American parent-adolescent relationships: A dyadic approach. *Journal of Child and Family Studies*, 29, 442-454.
6. Jenkins, A. I. C., Fredman, S. J., Le, Y., Sun, X., Brick, T. R., Skinner, O. D., & McHale, S. M. (2020). Prospective associations between depressive symptoms and marital satisfaction in Black couples. *Journal of Family Psychology*, 34, 12-23.
5. Sun, X., McHale, S. M., & Updegraff, K. A. (2019). Sibling experiences in middle childhood predict sibling differences in college graduation. *Child Development*, 90, 25-34. (Media mentions: [NICHD](#), [ScienceDaily](#), [Penn State News](#), [The University Network](#), [MedicalResearch](#), [知识分子](#))
4. Sun, X., McHale, S. M., & Updegraff, K. A. (2019). Sibling dynamics in adolescence predict young adult orientations to couple relationships: A dyadic approach. *Journal of Adolescence*, 77, 129-138.
3. Lawson, K. M., Sun, X., & McHale, S. M. (2019). Family-friendly for her, longer hours for him: Actor-partner model linking work-family environment to work-family interference. *Journal of Family Psychology*, 33, 444-452.
2. Sun, X., McHale, S. M., Crouter, A. C., & Jones, D. E. (2017). Longitudinal links between work experiences and marital satisfaction in African American dual-earner couples. *Journal of Family Psychology*, 31 (Special Issue: *Advances in Methods and Measurement in Family Psychology*), 1029-1039.
1. Sun, X., McHale, S. M., & Updegraff, K. A. (2017). Maternal and paternal resources across childhood and adolescence as predictors of young adult achievement. *Journal of Vocational Behavior*, 100, 111-123.

Chapters in Press & Published

- Sun, X. (in press). The role of digital technology in adolescent autonomy development: A four-factor model and a global perspective. *Adolescents and their families: A global perspective*. Springer.
- Sun, X.* & McMillan, C.* (2018). The interplay between families and technology: Directions for future investigation. In J. Van Hook, S. McHale, & V. King (Eds). *Families and technology*. Springer. (*Equal contributions)

Manuscripts in Preparation

- Sun, X., Dworkin, J., & LeBouef, S. *College student texting with family: Mixed-method analysis for understanding themes and sentiments*. Manuscript in revision for resubmissions.
- Sun, X. *Supervised machine learning for family research: Making predictions and identifying key family predictors*. Manuscript in preparation for invited submission to *Journal of Marriage and Family: Mid-Decade Special Issue on Theory and Methods*.
- Sun, X., Nielsen, K., Ram, N., Reeves, B., & Robinson, T. N. *Adolescent social media use and weight concerns: A longitudinal study with screenome data*. Manuscript in preparation.

- McHale, S. M., **Sun, X.**, Updegraff, K. A., & Whiteman, S. D. *Sibling intimacy across middle childhood, adolescence, and young adulthood: Trajectory and predictors*. Manuscript in preparation.
- Del Toro, J., Anderson, R. E., **Sun, X.**, & Lee, R. *Adolescents' resilience to ethnic/racial discrimination: A within-family design reveals the protective role of parents' ethnic/racial identities*. Manuscript in preparation for invited submission to *American Psychologist*: Special Issue on Rethinking Resilience and Posttraumatic Growth.

PRESENTATIONS AT SCHOLARLY MEETINGS

Invited Talks, Workshops, & Symposia

- Sun, X.** (2022, November). *Machine Learning for Human Development and Family Research: An Overview and an Example*. Talk for the Machine Learning Seminar Series, Data Science Initiative, College of Science and Engineering, University of Minnesota.
- Sun, X.** (2022, November). *Uncovering Hidden Perspectives: Using Machine Learning to Understand Fathering, Fatherhood, and Child Care Quality*. Symposium discussed at the National Council on Family Relations, Minneapolis, MN.
- Sun, X.** (2022, November). *Youth Sibling Relationships During the COVID-19 Pandemic*. Symposium discussed at the National Council on Family Relations, Minneapolis, MN.
- Sun, X.** (2022, November). Navigating and Negotiating the Academic and Alt-Ac Job Market. Panel discussed at the National Council on Family Relations, Minneapolis, MN.
- Dworkin, J. & **Sun, X.** (2022, March). *Navigating Social Media with Adolescents: Helpful Parenting Practices and Intervention Tools*. Webinar delivered for National Council on Family Relations.
- Sun, X.** (2022, February). *Introduction to Machine Learning for Human Development and Family Research*. Talk delivered at NICHD SBSBeat (Social and Behavioral Sciences Branch Education and Training) Seminar.
- Love, B. & **Sun, X.** (2021, July). *Big Data & Data Mining Approaches for Psychology Research*. Invited talk for the UCL (University College London)-PKU (Peking University) Summer School in Experimental Design in Psychology.
- Sun, X.** (2020, November). *Family Dynamics in the Digital World: Qualitative and Quantitative Analyses of Data From Interviews, Social Media, and Smartphones*. Symposium chaired at the National Council on Family Relations, virtual conference.
- Sun, X.** (2020, November). *Introduction to Machine Learning for Family Research: Basic Concepts, Common Algorithms, and Application Examples*. Workshop chaired at the National Council on Family Relations, virtual conference. (137 registered attendees)
- Sun, X.** (2019, November). *How Families Help Youth to Flourish: The Role of Family Dynamics in Adolescent and Young Adult Positive Well-Being*. Symposium chaired at the National Council on Family Relations, Fort Worth, TX.
- Sun, X.** (2019, March). *Leveraging Machine Learning Methods for Research on Child Development in the Big Data Era*. Symposium chaired at the Biennial Meeting of Society for Research in Child Development, Baltimore, MD.
- Sun, X.** (2018, June). *Sociocultural Contexts of the Work-Family Interface: A Call to Identify Resiliency Factors*. Symposium chaired at the Biennial Meeting of Work and Family Researchers Network, Washington, D.C.
- Sun, X.** (2018, April). *The Role of Family in Adolescent and Young Adult Romantic and Sexual Relationships: A Call for Systems Research*. Symposium chaired at the Biennial Meeting of Society for Research on Adolescence, Minneapolis, MN

Paper Presentations

- Sun, X.**, Nielsen, K., Ram, N., Reeves, B., & Robinson, T. N. (2023, April) *Adolescent social media use and weight concerns: A longitudinal Screenomics study*. Paper presentation under review for Annual Conference of Society for Research on Adolescence, San Diego, CA.

- Sun, X.,** Updegraff, K. A., Cahill, K., & Umaña-Taylor, A. J. (2022, November). *Identifying key contextual factors in Latinx parents' depressive symptoms: A machine learning approach*. Paper to be presented at the National Council on Family Relations, Minneapolis, MN.
- Sun, X.** & Wang, Y. (2021, November). *Typology of research on families and technology: A systematic review*. Paper presented at the TCRM conference at the National Council on Family Relations, virtual conference.
- Sun, X.,** Updegraff, K. A., McHale, S. M., Hochgraf, A. K., Gallagher, A. M., & Umaña-Taylor, A. J. (2021, April). *Implications of COVID-19 school closures for sibling dynamics among Latinx children: A daily diary study*. Paper presented at the 2021 SRCD Virtual Biennial Meeting.
- Sun, X.,** Reeves, B., Ram, N., Cho, M. J., Fitzgerald, A., & Robinson, T. N. (2020, November). *Pulling closer or pushing away? Ambivalence in the dynamics between young adults and parents in the digital context*. Paper presented at the National Council on Family Relations, virtual conference.
- Sun, X.,** Robinson, T. N., Ram, N., Reeves, B., Cho, M. J., Chiatti, A., Lee, J., Roehrick, K., Yang, X., & Fitzgerald, A. (2020, July). *Parent-young adult communication in the digital world: A Screenomics paradigm*. Paper presented at 6th International Conference on Computational Social Science (IC2S2), virtual conference.
- Sun, X.,** McHale, S. M., & Updegraff, K. A. (2019, November). *Career adaptivity mediates longitudinal links between parent-adolescent relationships and young adult occupational attainment*. Paper presented at the National Council on Family Relations, Fort Worth, TX.
- Sun, X.,** McHale, S. M., Updegraff, K. A., & Umaña-Taylor, A. J. (2019, November). *Implications of Mexican-origin youth's work experiences for relationships with fathers*. Paper presented at the National Council on Family Relations, Fort Worth, TX.
- Sun, X.,** & Ram, N. (2019, March). *Family experiences in adolescence predict young adult educational attainment: A machine learning approach*. Paper presented at Biennial Meeting of Society for Research in Child Development, Baltimore, MD.
- Sun, X.,** Chi, G., Yin, J., & McHale, S. M. (2018, October). *Sibling interactions and shared interests on Twitter: Analyses of a selected sibling sample based on archived Twitter data*. Paper presented at SRCD Special Topics: Conference on the Use of Secondary and Open Source Data in Developmental Science, Phoenix, AZ.
- Sun, X.,** McHale, S. M., & Crouter, A. C. (2018, June). *Perceived underemployment among African American spouses: Implications for couple relationships*. Paper presented at the Biennial Meeting of Work and Family Researchers Network, Washington, D.C.
- Lawson, K. M., **Sun, X.,** & McHale, S. M. (2018, June). *The associations between wives' and husbands' work-family environment and work-family spillover: Actor-Partner Interdependence Models*. Paper presented at the Biennial Meeting of Work and Family Researchers Network, Washington, D.C.
- Sun, X.,** & McHale, S. M. (2018, April). *Sibling dynamics in adolescence predict young adult orientations to couple relationships: A dyadic approach*. Paper presented at the Biennial Meeting of Society for Research on Adolescence, Minneapolis, MN
- Sun, X.,** McHale, S. M., Crouter, A. C., & Jones, D. E. (2017, November). *Longitudinal links between work experiences and marital satisfaction among African American dual-earner couples*. Paper presented at the National Council on Family Relations. Orlando, FL.
- Sun, X.,** McHale, S. M., & Updegraff, K. A. (2017, November). *Early parental resources predict young adult achievement*. Paper presented at the National Council on Family Relations. Orlando, FL.
- Padilla, J. & **Sun, X.** (2017, November). *Links between siblings' gender-typed characteristics and sibling relationship qualities*. Paper presented at the National Council on Family Relations. Orlando, FL.
- Sun, X.,** McHale, S. M., Updegraff, K. A., & Umaña-Taylor, A. J. (2017, May). *Sleep duration predicts time spent on homework among Mexican American adolescents: A daily diary study*. Paper presented at the Pennsylvania State University Mini-Conference on Multivariate/Longitudinal Methods. University Park, PA.

Poster Presentations

- Sun, X.,** LeBouef, S., & Dworkin, J. (2021, November). *It's how you talk about it: Linguistic correlates of family dynamics from young adults' interviews*. Poster presented at the National Council on Family Relations, virtual conference
- Sun, X.,** Haydel, K. F., Matheson, D., Desai, M., & Robinson, T. N. (2021, April). *Prospective study of mobile phone acquisition and ownership and well-being among Latinx children*. Poster presented at the 2021 SRCD Virtual Biennial Meeting.
- Sun, X.,** McHale, S. M., Updegraff, K. A., & Umaña-Taylor, A. J. (2018, April). *Time spent on homework among Mexican American adolescents: Contextual correlates and implications for achievement*. Poster presented at the Biennial Meeting of Society for Research on Adolescence, Minneapolis, MN
- Sun, X.,** McHale, S. M., & Updegraff, K. A. (2017, April). *Sibling experiences in middle childhood: Implications for sibling differences in college graduation*. Poster presented at the Biennial Meeting of Society for Research in Child Development, Austin, TX.
- Mayfield, K., **Sun, X.,** & McHale, S. M. (2016, October). *Correlates of fathers' and mothers' coparenting in African American families*. Poster presented at the special topics meeting, Babies, Boys, and Men of Color, Society for Research in Child Development, Tampa, FL.
- Sun, X.,** Kim, J. J., Fung, J. J., Park, H. & Lau, A. S. (2014, September). *Mothers' and children's implicit theories of intelligence: Implications for child mental health in Hong Kong families*. Poster presented at the Symposium for UCLA Cross-disciplinary Scholars for Science and Technology, Los Angeles, CA.

TEACHING EXPERIENCE

University of Minnesota, Department of Family Social Science

Instructor

Spring 2022	FSOS 3105: Technology in Parenting and Family Relationships
Fall 2022	FSOS 3105: Technology in Parenting and Family Relationships
Spring 2022	FSOS 5015: Family Research Laboratory FSOS 3105: Technology in Parenting and Family Relationships (co-instructor)

The Pennsylvania State University, Department of Human Development and Family Studies

Instructor

Summer 2019	HDFS 129: Introduction to Human Development and Family Studies
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Guest Lecturer

Spring 2017	HDFS 433: Developmental Transition to Adulthood "Family as a context of young adult career development"
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Teaching Assistant

Spring 2019	HDFS 129: Introduction to Human Development and Family Studies
Spring 2017	HDFS 249: Adult Development and Aging

SERVICE TO THE UNIVERSITY AND THE PROFESSION

University of Minnesota, Department of Family Social Science

09/2022 – Present Member of Undergraduate Student Committee

The Pennsylvania State University, Department of Human Development and Family Studies

08/2018 – 05/2019 Graduate Student Representative to Faculty Meetings

08/2017 – 05/2018 Student Advisor

Funding Agencies

2022 Ad Hoc Reviewer, National Science Foundation—Developmental Sciences Program

Peer-Reviewed Journals

- 2022 Consulting Editor, *Cultural Diversity and Ethnic Minority Psychology*
Ad Hoc Reviewer, *Developmental Psychology*, *Journal of Marriage and Family*, *Journal of Family Psychology*, *Youth & Society*, *Social Development*, *Social Science Research*, *Journal of Social and Personal Relationships*
- 2021 Consulting Editor, *Cultural Diversity and Ethnic Minority Psychology*
Ad Hoc Reviewer, *Journal of Family Psychology*, *Chinese Sociological Review*, *Frontiers in Psychology*, *International Journal of Psychology*, *Youth & Society*, *Journal of Social and Personal Relationships*
- 2020 Ad Hoc Reviewer, *Journal of Adolescence*, *Youth & Society*, *Personal Relationships*, *Applied Psychology: An International Review*, *Community, Work and Family*
- 2019 Ad Hoc Reviewer, *Journal of Child and Family Studies*, *Developmental Psychology*, *Journal of Family Studies*
Co-reviewer, with Susan M. McHale, Ph.D., *Journal of Family Psychology*
- 2017 Ad Hoc Reviewer, *Journal of Family Psychology*
Co-reviewer, with Susan M. McHale, Ph.D., *Journal of Marriage and Family*

Professional Organizations and Conferences

- 2022 Panel Reviewer, *Society of Research on Adolescence*
Social Media Coordinator for the Sibling Focus Group, *National Council on Family Relations*
- 2021 Committee Member for Reuben Hill Award, *National Council on Family Relations*
Panel Reviewer, *Society of Research on Adolescence*
- 2020 Panel Reviewer, *Society of Research on Adolescence*, *National Council on Family Relations*, *Society for Research on Child Development*
- 2019 Panel Reviewer, *National Council on Family Relations*

NON-ACADEMIC PUBLICATIONS AND TALKS

- Sun, X. (2020, September). Sexual objectification of women: Are “compliments” on the body harmless? [in Chinese; 女性物化: “你的身材真好”, 是一种无害的夸奖吗?] *Ms. Muses, WeChat*, 3282 views.
- Sun, X. (2020, February). “Why is he not texting me back?” How smartphones influence intimate relationships. [in Chinese; “他为什么总不回我信息?” 手机如何影响亲密关系] *Ms. Muses, WeChat*, 2593 views.
- Sun, X. (2018, December). Growing up in the same family, why siblings can become so different? [in Chinese; “同一屋檐下, 兄弟姐妹为何成为不同的人”] *Ms. Muses, WeChat*, 2178 views.
- Sun, X. (2017, December). “How to improve your children’s academic performances? Perspectives from developmental psychology.” [in Chinese] Invited online parenting workshop by UltraBear Education, Inc., 3031 views.
- Padilla, J., & Sun, X. (2017, April). “Sibling Relationships in Childhood and Adolescence” The 93rd Annual Pennsylvania Association of Family and Consumer Sciences (PAFCS) Conference, State College, PA.
- Sun, X. (2017, February). Is a “Churning” Relationship True Love? [in Chinese; “分分合合”的感情才是真爱吗?] *Ms. Muses, WeChat*. 2916 views.