Danny Wang M.S.

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Current

2022 -	Doctoral student in Biobehavioral Health (BBH), The Pennsylvania State University
2022 -	Graduate research assistant, Addiction and Innovative Methods Lab (AIM)
2022 -	Data analyst, Evidence-based Prevention and Intervention Support (EPIS)
2021 -	Data analyst consultant, University of Alabama at Birmingham

Education

2017	M.S.	Experimental Psychology, The University of Texas at San Antonio
2014	B.A.	Psychology, The University of Texas at San Antonio

Research Interest

My primary research focus is the application of innovative quantitative methods to substance use and related health data. From a methodological standpoint, I am interested in how to gain the most information from intensive longitudinal designs (ILD) such as daily diary studies, ecological momentary assessments (EMA), and micro randomized trials (MRT). I am interested in utilizing these techniques to address daily and momentary effects on substance use patterns, for example to model moment-to-moment or day-to-day mood states to examine how emotions from a previous occasion can affect the risk of substance use on the next. I also would like to understand how compliance rates and participant burden in intensive longitudinal designs can be affected by design factors, as the use of ILD and EMA has become increasingly prominent in current research. Ultimately, by gaining an understanding of how temporal effects modulate substance use over time, I hope to inform more nuanced momentary-level interventions that target high-risk substance use.

Funding

2023 - 2025	The Prevention and Methodology Training Program (T32 Fellowship)

Awards

2024	Biobehavioral Health Travel Award
2023	Biobehavioral Health Travel Award
2022	Graham Fellowship Award
2022	Fund for Excellence in Graduate Recruitment
2016	UTSA Spring Research Conference (3rd place)

Previous Experience

2019 - 2022	Statistician, University of Alabama at Birmingham
2018 - 2020	Statistician, UT Health San Antonio
2017 - 2018	Lecturer 1, University of Texas at San Antonio
2016 - 2018	Graduate research assistant, University of Texas at San Antonio

Publications (Peer Reviewed)

Fazeli, P.L., Hopkins, C., Vance, D.E., Wadley, V., Li, P., Turan, B., **Wang, D.**, Bowen, P.G., & Clay, O.J. (2023) Cognitive prescriptions for reducing dementia risk factors among Black/African Americans: feasibility, acceptability, and preliminary efficacy. *Ethnicity & Health*.

Puga, F., **Wang, D.**, Rafford, M., Poe, A., Pickering, C., (2022) The Relationship Between Daily Stressors, Social Support, Depression and Anxiety Among Dementia Family Caregivers: A Micro-Longitudinal Study. *Aging and Mental Health*, 1-9.

Pickering, C., Maxwell, C., Yefimova, M., **Wang, D.**, Puga, F., Sullivan, T., (2022) Early Stages of COVID-19 Pandemic Had No Discernable Impact on Risk of Elder Abuse and Neglect Among Dementia Family Caregivers: A Daily Diary Study. *Journal of Family Violence*. doi:10.1007/s10896-022-00392-8

Kim, H., Son J., Lee D., Tsai j., **Wang, D**., Chocron, E., Jeong, S., Kittrell, P., Murchison, C., Kennedy, R., Tobon, A., Jackson, C., Pickering, A. (2022) Gut and Oral Dysbiosis Differentially Impact Spinal and Bulbar Onset ALS, Predicting ALS Severity and Potentially Determining the Location of Disease Onset. *BMC Neurology*.

Pickering, C., Yefimova, M., **Wang, D.**, Maxwell, C., Jablonski, R. (2022) Dynamic Structural Equation Testing of the Progressively Lowered Stress Threshold Model as an Explanation for Behavioral Symptoms of Dementia. *Journal of Advance Nursing*.

Grant, J., Graven, L., **Wang, D.**, Luttic, M., and Azuero, A., (2022) The Subjective Component of the Dutch Objective Burden Inventory: A Psychometric Analysis. *The Journal of Cardiovascular Nursing*.

Submitted

Mildrum Chana, S., Álvarez, L., Poe, A., Bibriescas, N., **Wang D.**, DiFiglia, S., Azuero, A., Crowe, M., Puga, F., (Revise and resubmit). The Daily Experiences of Hispanic and Latinx Dementia Caregivers Study: Protocol for a Fully Remote Daily Diary Observational Cohort Study

Lanza, S., Linden-Carmichael, A., **Wang, D.**, Bhandari, S., and Stull, S.W. (Under review). A Personalized Data Dashboard to Improve Compliance with Ecological Momentary Assessments: Protocol for a Study to Compare EMA as Usual to EMA with a Data Dashboard Deployed in a Micro-Randomized Trial.

Linden-Carmichael, A., Stull, S.W., **Wang, D.**, Bhandari, S., and Lanza, S. (In-progress). Impact of Receiving a Personalized Data Visualization Dashboard on Ecological Momentary Assessment Performance among College Students Who Use Alcohol and Cannabis: A Pilot Study

Schwendler, T.R., **Wang, D.**, Fofana, M.L., Daffe., M., Keller, K.L., Jensen, L., Na, M., Balde, I., Kodish, S.R. (Under review). Understanding the biocultural factors influencing infant diets in peri-urban Guinea: findings from a mixed-methods study.

C., Pickering, V. Winstead, M. Yildiz, **D. Wang**, M. Yefimova & A. M. Pickering. (Under review). Subsyndromes & Symptom Clusters: Multi-Level Factor Analysis of Behavioral and Psychological Symptoms of Dementia with Intensive Longitudinal Data

Yefimova, M., **Wang, D.**, Maxwell, C., Sullivan, T., Puga, F., Pickering, C. (Under review). Potentially Inappropriate Administration of Medications as Chemical Restraint among Dementia Family Caregivers.

Abstracts

Puga, F., **Wang, D.**, Rafford, M., & Pickering, C. E. (2022). Daily Stressors, Social Support, and Mental Health Experiences of Dementia Family Caregivers. *Alzheimer's & Dementia*, 18, e065923.

Armah, H., Vickers, J., **Wang, D.**, & Pickering, C. (2022). Strategies To Ensure Authentic Participants and Valid Data with Online Recruitment of Family Caregivers. *Innovation in Aging*, 6(Suppl 1), 653-653.

Pickering, C., Yefimova, M., **Wang, D.**, Maxwell, C., & Jablonski, R. (2022). Progressively Lowered Stress Threshold for Behavioral Symptoms of Dementia: A Dynamic Structural Equation Model. *Innovation in Aging*, 6(Suppl 1), 50.

Vickers, J., **Wang, D.**, & Pickering, C. (2022). Delirium-Like Behavioral Symptomatology in Community-Dwelling Older Adults with Dementia. *Innovation in Aging*, *6*(Suppl 1), 468.

Puga, F., Poe, A., Rafford, M., **Wang, D.**, & Pickering, C. (2022). Contextual Factors Associated with Decreased Daily Depression and Anxiety Among Dementia Caregivers. *Innovation in Aging*, 6(Suppl 1), 100.

Pickering, C., Puga, F., **Wang, D.**, Yefimova, M. (2020). The Half Life of Stress: Caregiver Stress Increases Next-Day Severity of Behavioral Symptoms of Dementia. *Innovation in Aging*. 4. 253-254.

Puga, F., **Wang, D.**, Pickering, C. (2020). Suicidal Ideation in Dementia Family Caregivers. *Innovation in Aging*. 4. 477-477.

Puga, F., **Wang, D.**, Pickering, C. (2020). Daily stressful experiences, depressive symptoms, and behavioral responses of ADRD family caregivers: Dementia care research (research projects; nonpharmacological)/Family/lay caregiving. *Alzheimer's & Dementia*. doi:16. 10.1002/alz.044050.

Conference Posters and Talks

Wang, D., Linden-Carmichael, A. N., Stull, S. W., & Lanza, S. T. (2024, June). *Examining Compliance in Ecological Momentary Assessment: Modeling the Autoregressive Nature of Moment-Level Missingness.* Poster presented at the annual meeting of the Society for Ambulatory Assessments, Ann Arbor, MI.

Wang, D., Lanza, S. T., Stull, S. W., & Linden-Carmichael, A. N. (2024, May*). Latent class analysis of daily substance co-use patterns in young adults: Leveraging daily diary data to identify complex phenotypes.* Poster presented at the annual meeting of the Society for Prevention Research, Washington, D.C.

Puga, F., Poe, A., & **Wang, D.** (2023). *Applying Time-Varying Effect Modeling to Examine Daily Variation in Suicidal Ideation Among Dementia Caregivers.* Gerontological Society of America, Tampa, FL.

Puga, F., **Wang, D.**, Bibriescas, N., Poe, A., Loreli, A., Jablonski, R.A., Vance, D.E. (2023). *Daily Factors Associated with Emotional Dysregulation Among Dementia Caregivers.* Gerontological Society of America, Tampa, FL.

Puga, F., **Wang, D.**, Bibriescas, N., Poe, A., Loreli, A., Jablonski, R.A., Vance, D.E. (2023). *Role Captivity, Daily Social Isolation, and the Mental Health of Dementia Caregivers.* Gerontological Society of America, Tampa, FL.

Pickering, C. E., Winstead, V., Yildiz, M., **Wang, D.**, Yefimova, M., & Pickering, A. (2023). *Multi-level Factor Analysis of Daily Data to Identify Subsyndromes of Behavioral and Psychological Symptoms.* In Alzheimer's Association International Conference. ALZ.

T.R., Schwendler, **Wang, D.**, Fofana, M.L., Daffe, M., Kodish, S.R., (2023) *Understanding the biocultural factors influencing infant dietary diversity scores in peri-urban Guinea: Findings from a mixed-methods study.* Micronutrient Forum, October 2023, The Hauge, Netherlands

Wang, D., Lanza, S. T., Stull, S., Dennis, M., & Scott, C.K. (2023). *Momentary latent class membership to predict self-efficacy and subsequent substance use.* The annual meeting of the College of Problems on Drug Dependence, Denver, CO.

Sullivan, T.P., Clayton, A., **Wang, D.**, Cannon, G., and Belliveau, D. (2023). *IPV type as a target of interventions for depression; Results of a micro-longitudinal study.* Paper presented at the Society for the Advancement of Violence and Injury Research, Denver, CO.

Hernandez, J., Browning, W., **Wang, D.**, Pickering, C. (2022). *Risk factors for hazardous drinking among dementia family caregivers.* Gerontological Society of America, Indianapolis, IN.

McGlothen-Bell, K., Recto, P., McGrath, J., Brownell, E., Bibriescas, N., **Wang, D.**, Cleveland, L. (2019). *The impact of opioids on maternal-infant interaction, stress response, and attunement.* Presented at the Behavior, Biology, and Chemistry: Translational Research in Addiction Conference.

Scott, L., Emmerich, **A., Wang, D.**, Bibriescas, N., Levos, T., Cleveland, L. (2019). *Link to recovery: Follow-up for opioid overdose survivors.* Presented at the Behavior, Biology, and Chemistry: Translational Research in Addiction Conference**.**

Wang, D., Emmerich, A., Bibriescas, N., Scott, L., Cleveland, L. (2019*). Preparing first responders to reduce opioid overdose deaths in Texas.* Presented at the Behavior, Biology, and Chemistry: Translational Research in Addiction Conference.

Wang, D., Mangold, D. (2017). *Depressive Symptomatology Mediates the Relationship Between Discrimination and Somatization in Mexican Americans.* Presented at Southwestern Psychological Association Conference 2017.

Wang, D., Walker, K., Mangold, D. (2016). *Gender and Acculturation on the Cortisol Awakening Response in Mexican-Americans.* Presented at 2016 COLFA Spring Research Conference UTSA

Walker, K., **Wang, D.**, Mangold, D. (2016). *Depression and Childhood Trauma on Somatization in Mexican Americans.* Presented at 2016 Psychology Student Research Conference UTSA.

Supplemental Training

2021	Structural Equation Modeling

2021   Structural Equation Modeling
Inter-university Consortium for Political and Social Research (ICPSR); Instructor: Kenneth Bollen PhD.

2021   Bayesian Statistics
ICPSR; Instructor: Johannes Karreth PhD.

2021   Latent Class/latent Profile, and Latent Transition Analysis
ICPSR; Instructor: Stephanie Lanza PhD and Bethany Bray PhD.

2021   Longitudinal Data Analysis
ICPSR; Instructor: Donald Hedeker PhD.

Areas of Expertise

- **Advance Statistics:** Multilevel design (mixed effects), Latent modeling (CFA, SEM, LCA, etc.), timeseries (lagged models, DSEM), Bayesian analysis, generalized linear modeling (binomial/count data/zero inflated negative binomial), intensive longitudinal design.
- **Data Science**: Cleaning, wrangling, visualization, modeling, interpretation.
- **Social and behavioral research:** Experimental design, cortisol, stress response, acculturation/bi-culturation.
- **Data Collection Software:** REDCap, Qualtrics.
- **Statistical Software packages:** R, SPSS, Mplus, Excel.