



# Associations between Parental Technology Rules, Adolescent Technology Interactions, and Mental Wellbeing



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## Introduction

- Over three-quarters of adolescents use social media
- Some previous studies have found associations between social media use and mental wellbeing outcomes among adolescents
- The role of parents in influencing adolescent technology interactions and mental wellbeing remains unclear



The purpose of this study was to understand associations between parental technology rules, adolescent technology interactions, and adolescent mental wellbeing.

## Methods

This study was approved by the University of Wisconsin-Madison Minimal Risk Institutional Review Board

### Design and Setting

- This study was a cross-sectional secondary analysis
- Data were collected in 2019

### Participants

- Participants were recruited through Qualtrics panels
- Adolescents and parent dyads were recruited
  - Adolescents: 12-17 years old
  - Parents: eligible parents had a child participating in this study

### Measures

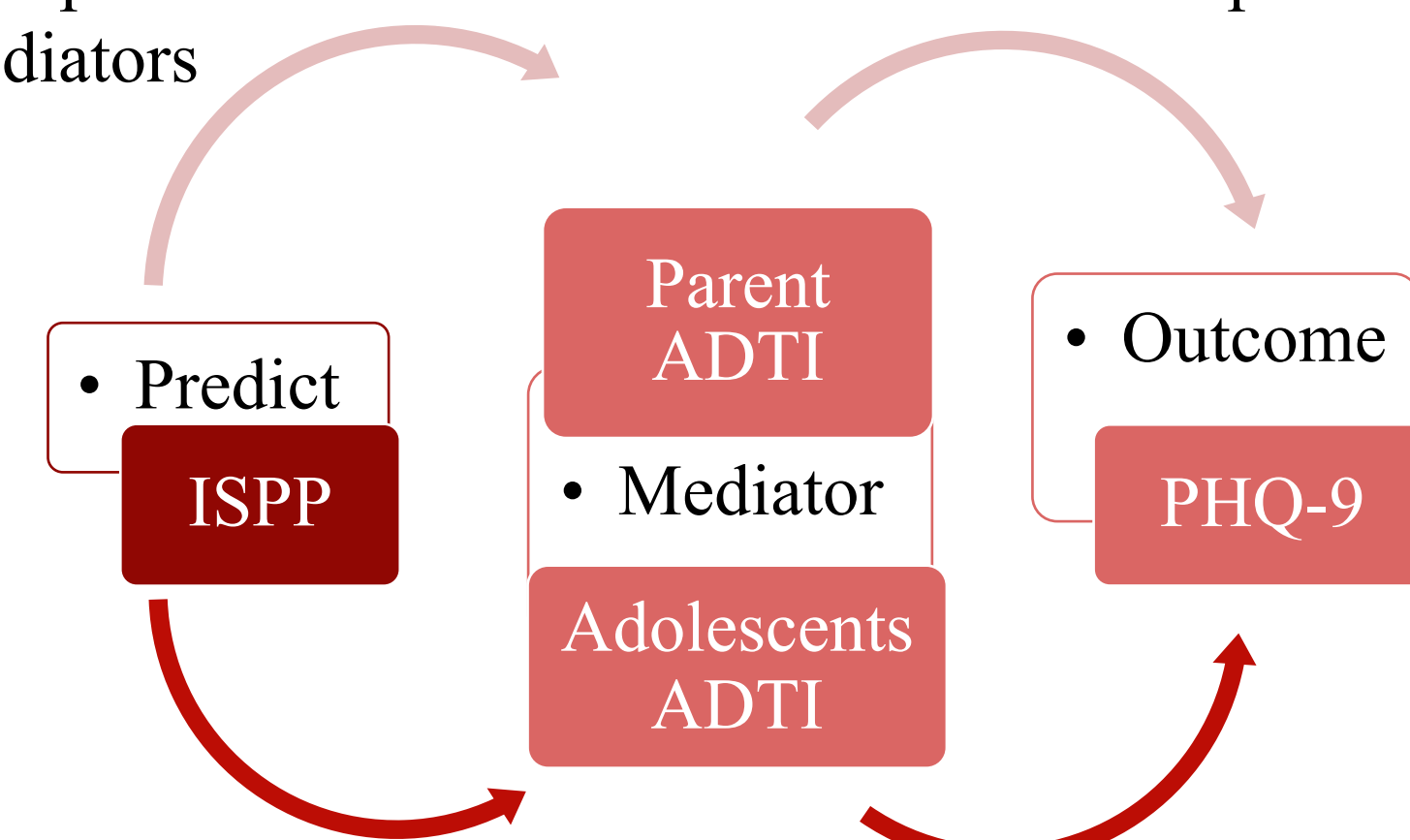
Variable	Survey Scales	Participants
Adolescent technology interactions	Adolescents' Digital Technology Interactions (ADTI)	parents and adolescents
Parent technology rules	Internet-Specific Parenting Practices (ISPP)	parents only
Adolescent mental wellbeing	Short Warwick-Edinburgh Mental Well-being (SWEMW)	adolescents only
Adolescent depression	Patient Health Questionnaire-9 (PHQ-9)	adolescents only

- Each survey scale used a Likert scale, and participant responses were summed to generate a score for each scale
  - ADTI: 1-5 scale (1= Not at all important, 5 = extremely important)
  - ISPP: two different types of responses on a 1-5 scale (Absolutely not true=1, Absolutely true = 5; Never = 1, Very often = 5)
  - SWEMW: 1-6 scale (None of the time=1, All of the time=5, Prefer not to answer=6; summary scored)
  - PHQ-9: 0-3 scale (Not at all = 0, Nearly every day = 3)

### Analysis

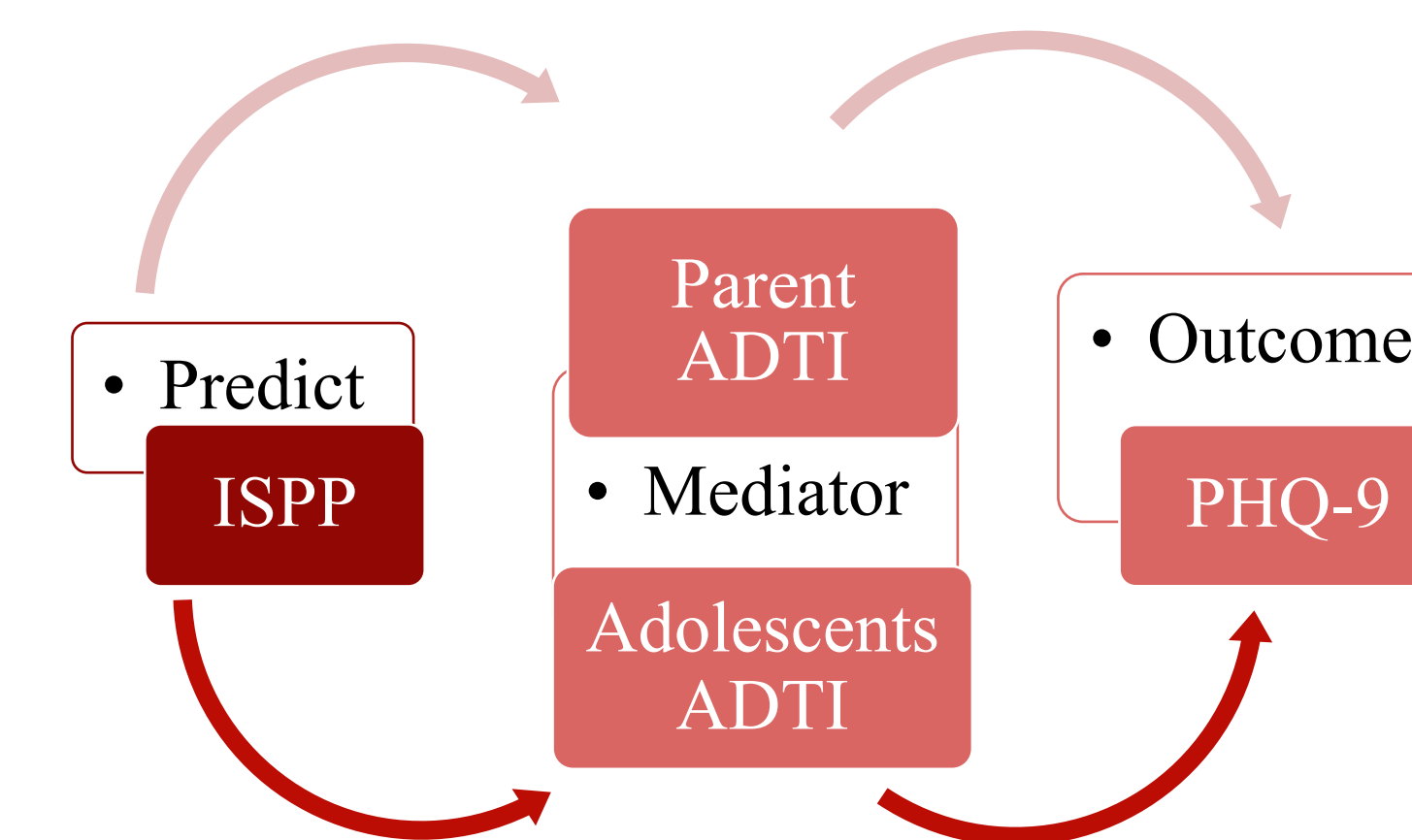
#### Model 1:

- The first model tested mediation to determine if ISPP was a predictor for the outcome variable SWEMW (well-being) with parent and adolescent ADTI scores as separate mediators



#### Model 2:

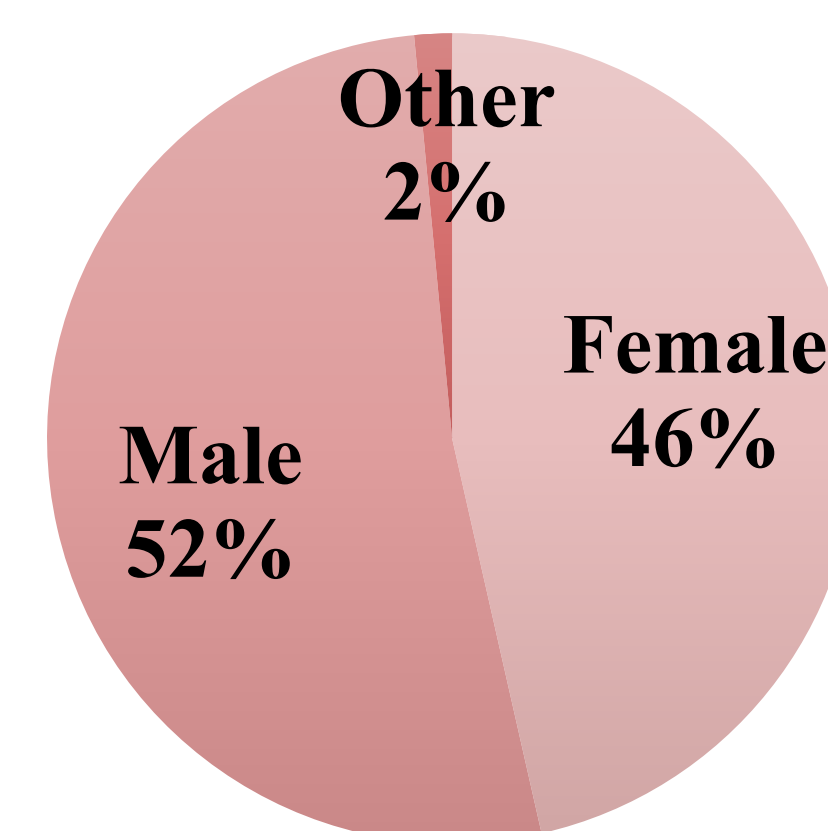
- The second model tested mediation to determine if ISPP was a predictor for the outcome variable PHQ-9 (depression) with parent and adolescent ADTI scores as separate mediators



## Results

### Adolescent Participant Gender

- There were a total of 4592 participants in this study



### Adolescent Participant Demographics

N = 4592		
Characteristic	n	%
Ethnicity		
Non-Hispanic/Latino	3707	80.7
Mexican American	439	9.6
Puerto Rican	178	3.9
Cuban	50	1.1
Another Hispanic, Latino, or Spanish origin	152	3.3
Did not disclose	66	1.4
Race		
American Indian/Alaskan Native	116	2.5
Asian	211	4.6
Asian Indian	17	0.4
Other Asian	7	0.2
Black or African American	699	15.2
Caucasian/White	3070	66.9
Latino/Hispanic/Mexican	102	2.2
Native Hawaiian or other Pacific Islander	36	0.8
More than one race	221	4.8
Other	31	0.7
Did not disclose	2	6.5

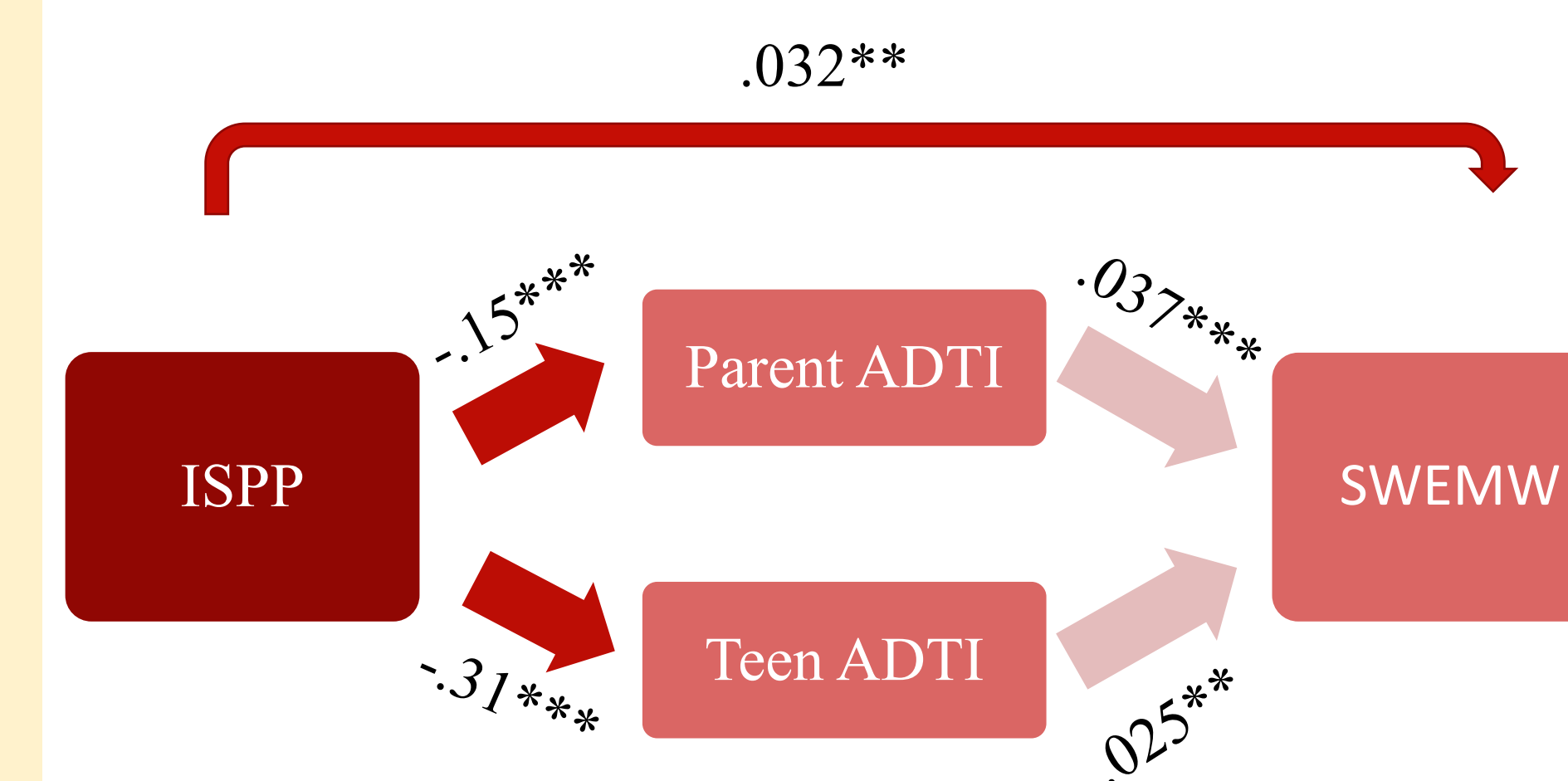
### Mediation Models

\*\* = p-value < .001  
\*\*\* = p-value < .0001

#### Model 1:

- Total Effect

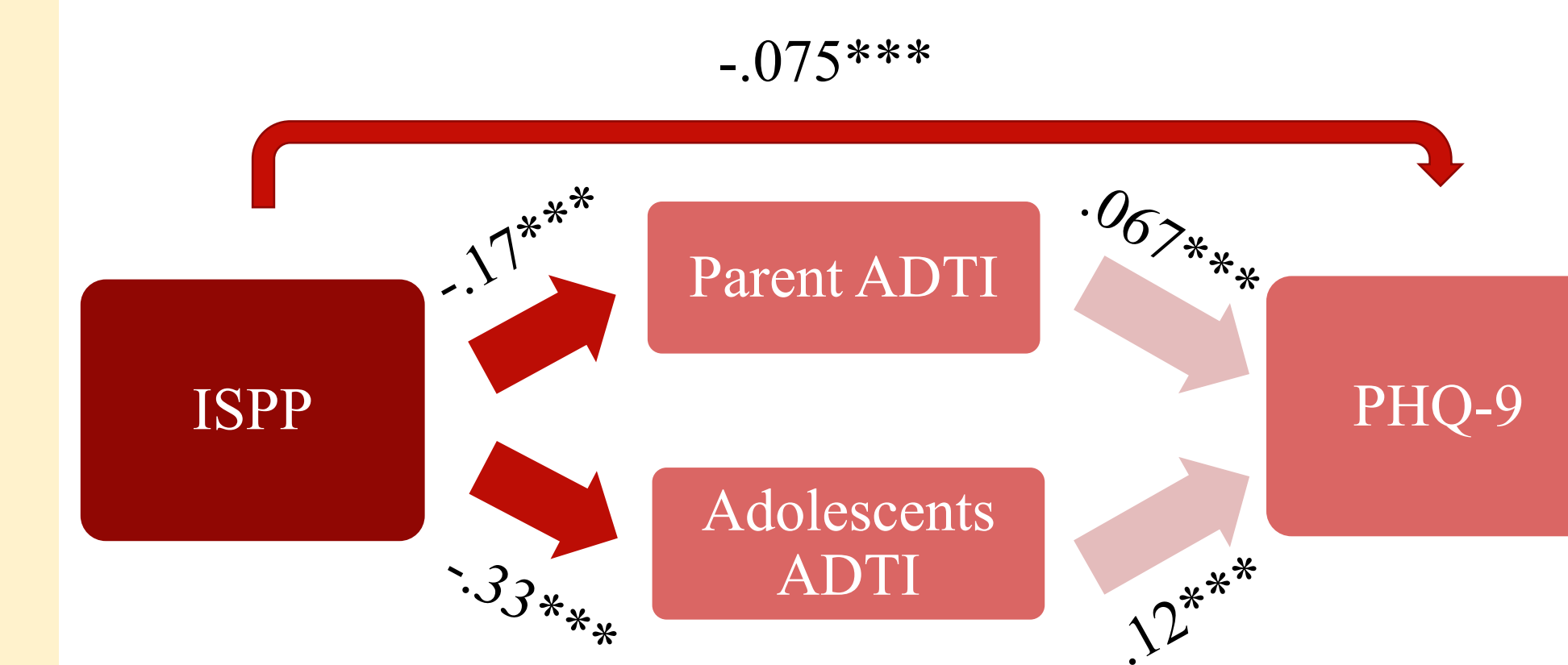
Effect	se	t	p	LLCI	ULCI
.0191	.0096	1.9970	.0459	.0003	.0378



#### Model 2:

- Total Effect

Effect	se	t	p	LLCI	ULCI
-.1245	.0135	-9.239	.0000	-.1509	-.0980



## Discussion

- Findings suggest stricter parent technology rules are associated with increased mental wellbeing and decreased depression for adolescents
- This relationship may be mediated by the importance parents and adolescents place on technology interactions
- Findings may inform pediatric providers guidance on notifying parents about having technology rules to better the mental well being of their adolescents
- Future studies should examine associations between parental technology rules, technology interactions, and other mental health outcomes, such as anxiety, among adolescents

## Acknowledgements

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