

# **Demographic Predictors of Engagement with a Technology-Based Treatment for Depression Among Monolingual Spanish Speakers**

## Background

- > Approximately 27.3% of Latinx adults with limited English proficiency (LEP) report symptoms of depression, but only 22% of those symptomatic receive treatment.
- > Mobile health treatments delivered in Spanish can efficaciously help to reduce depressive symptoms with previous randomized clinical trials showing a 34.4% reduction in depressive symptomatology through the use of a mobile app.
- $\succ$  However, predictors of mHealth treatment engagement by patients with elevated depressive symptoms is unclear.
- $\succ$  To meet the need for an evidence-based mHealth depression treatment for Latinx adults with limited English proficiency our team developed *¡Aptívate!*.
  - > *¡Aptívate!* is informed by the Brief Behavioral Activation Treatment for Depression, an evidence-based depression treatment that has demonstrated efficacy among this population.

## Study Aim

> The aim of this study was to examine individual-level *¡Aptívate!* treatment engagement predictors to identify subgroups most and least likely to engage with the intervention.

## **Methods**

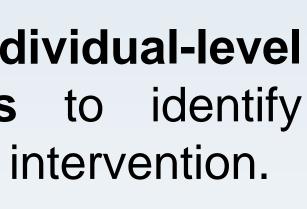
- $\geq$  <u>Sample:</u> Secondary exploratory analysis of participants (n=22) who received *¡Aptívate!* for depression treatment as part of a larger randomized clinical efficacy trial.
- Sample Measures
  - > Demographic Predictors: 1) Rurality, 2) Age, 3) Beck Depression Inventory (BDI), 4) Beck Anxiety Inventory (BAI), 5) Gender (female vs. not female), 6) Education (< HS diploma vs.  $\geq$  HS diploma), 7) Employment status (unemployed vs. employed), 8) Income (< 50k vs.  $\geq$  50k), 9) Relationship status (single vs. in a relationship)

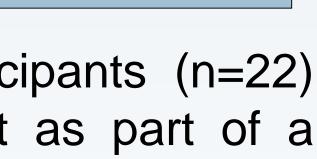
> Retention Measures: 1) Total number of sessions, 2) 4-week retention, 3) 8-week retention, 4) Total time using the app.

Data Analytic Plan: Individual Chi-Square and ANOVA analyses were performed to examine associations between each demographic predictor and engagement metric

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## Demographics

n	22
Age (M(SD))	32.4 (9.2)
Gender (% Female)	77.3%
Rurality (Isolation Index)	3.7 (1.1)
Ethnicity (% Hispanic)	100%
Relationship Status (% in Relationship)	54.6%
Education (% ≥ High School Diploma)	90.9%
Annual Household Income (% ≥ \$50k)	22.7%
Employment Status (% Employed)	50.0%
BAI (M(SD))	44.9 (10.9)
BDI (M(SD))	32.2 (9.2)



¡Aptívate! Treatment Engagement									
Individual – Level Predictors	Total Number of Sessions		Retention – 4 Weeks		Retention – 8 Weeks		Total Time Spent Using the App (minutes)		
	В	P Value	В	P Value	В	P Value	В	P Value	
Rurality (isolation Index)	0.64	0.004	0.50	0.04	0.49	0.04	0.65	0.003	
Age	0.72	0.00	0.49	0.02	0.66	0.001	0.77	0.00	
BDI	0.19	0.40	0.34	0.12	0.13	0.57	0.29	0.19	
BAI	0.37	0.09	0.39	0.07	0.16	0.48	0.30	0.18	

Aptivate! Treatment Engagement								
Individual – Level Predictors	Total Number of Sessions		Retention – 4 Weeks		Retention – 8 Weeks		Total Time Spent Using the App (minutes)	
	Chi- square	P Value	Chi- square	P Value	Chi- square	P Value	Chi- square	P Value
Gender	18.20	0.38	0.002	0.96	0.002	0.96	19.53	0.45
Education	16.31	0.50	0.98	0.32	0.002	0.96	19.15	0.45
Employment Status	19.31	0.31	2.16	0.14	1.32	0.25	19.98	0.40
Income	12.98	0.60	0.29	0.87	0.01	0.91	19.00	0.33
Relationship Status	19.98	0.28	0.90	0.34	0.006	0.94	19.83	0.40

- likely to engage with *¡Aptívate!*
- available treatment alternatives.
- areas.

## Acknowledgements

K23 DA045766, and R41 MD010491.



## Results

#### : Antivatal Treatment Engagement

### Conclusions

> Older participants residing in more rural areas were more

> Findings suggest technology based treatments can potentially help to reduce health disparities existing due to lack of

 $\succ$  Future research may focus on ways to engage younger adults with limited English proficiency or adults residing in more urban

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