#### **IPRO 306**

# Enhancing Psychology Research Through Advanced Communications Technology



Team: Tarek Abou-Nemeh, Tina Chiu, Kevin Franke, Krystin Hernandez, Alice Jacob, Christopher Jones, Chelsea Miller, Vladislav Vilenchik & Stephanie Walter

Faculty Advisors: Michael Young, Ph.D. Dror Ben-Ze'ev, M.S.

Sponsor: IPRO Office

#### Introduction Problem

# Lack of research on recall of affect in the depressed population

- Clinicians rely on patient recall and report of affect
- If depressed individuals report inaccurate or exaggerated affect, treatment and interventions may be inappropriate

## Introduction Solution

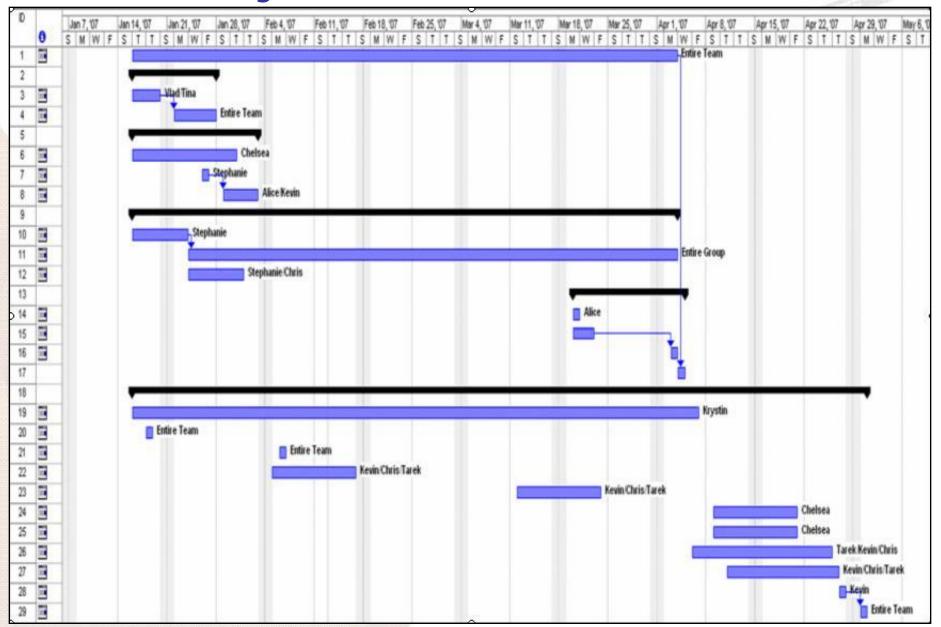
#### Conduct a study

- Use Experience Sampling Method (ESM) to record momentary affect and compare the average to retrospective recall
- Use data to evaluate accuracy of retrospective recall in depressed participants

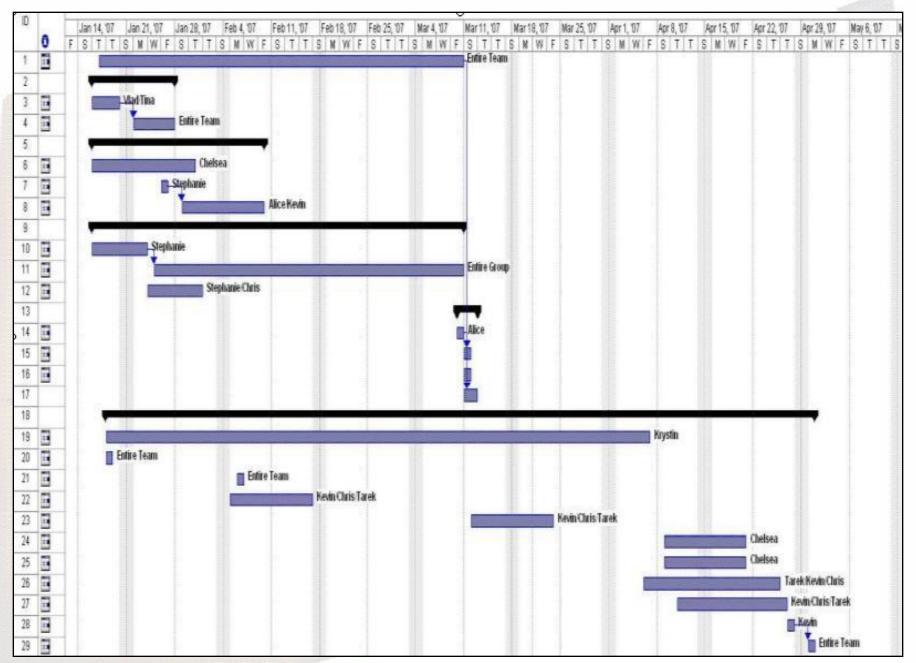
## Introduction Goals

- 1. Recruit participants from Chicago area
  - 25 healthy and 25 depressed volunteers
- 2. Collect valid data from each eligible volunteer
- 3. Improve and maintain lab efficiency
  - Implement shift system
  - Train all members in lab proficiency
  - Solve any PDA problems
- 4. Organize, enter, and analyze data
  - Ensure efficient and error-free data entry

## Project Plan - Timeline



#### **Revised Timeline**



#### Methodology

- 1. Experience Sampling Method (ESM)
- 2. Personal Digital Assistant (PDA)
- 3. Experience Sampling Program (ESP)
- Positive Affect Negative Affect Scale (PANAS; 1988)

## Methodology

- Momentary mood ratings during the week
  - 8 beeps/day
  - 7 days
  - 9:00AM 10:00PM
- Retrospective mood rating at end of week
- The average momentary reports can be compared with the retrospective report to analyze any patterns or trends in retrospective recall

# MethodoloRécruitment

- 1. Online ads updated on weekly basis
- 2. All IPRO
  members sent
  to recruit based
  on the tier
  system
- 3. IPRO study perpetuated through word-of-mouth



# Methodology Screening

- Multi-step Process
  - Phone screening
  - Beck Depression Inventory (BDI)
    - Clinical Interview

## Methodology PDA Troubleshooting

- 1. Beeping, Problems
  - Beep at wrong times or not at all
- 2. Beeping, Solutions
  - Include charger with PDA distribution
  - Charge PDA only after 10:00PM
  - Technical support for PDA reset
- 3. Beeping, Significance
  - Ensure full data collection
  - Prevent invalidation of data

# Methodology Entry Data Collection & Entry

- Consistently verified data obtained from participant PDAs and ensured its quality
- 2. Data Entry sub-team created to enter participant data into computer for analysis
- Data entries were checked, double-checked, and rechecked for errors

#### **Barriers & Obstacles**

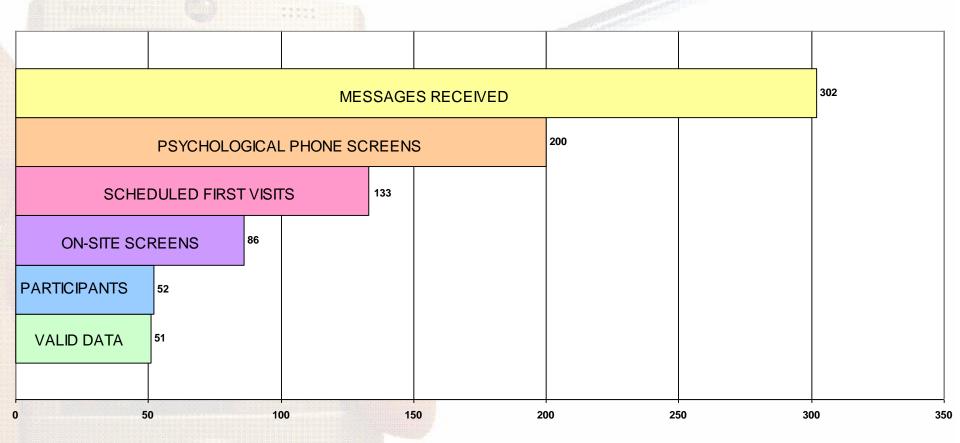
PROBLEM	SOLUTION
Participants with disabilities	Accommodate their needs
Space Limitations	Get more space
Malfunctioning PDAs	PDA troubleshooting sheet
Bad Weather	Weather the storm
Team members only specialized in some tasks	Train and evaluate team members' competency in all areas; Create documentation
Participant Punctuality/No-	Reminder phone calls
Shows	30 minute time slots
Lab inefficiency	Implement shift system

## Lab Improvements

- Shift System
  - 30 minute slots
  - Maximize lab operating hours
  - On-call shifts
- Training & Evaluation
  - All IPRO members equally proficient
- Results
  - November 14<sup>th</sup> February 2<sup>nd</sup>
  - February 2<sup>nd</sup> March 8<sup>th</sup>
    - » Low confidence to eager beavers for busier days!
    - » Lean mean mood researching machines!

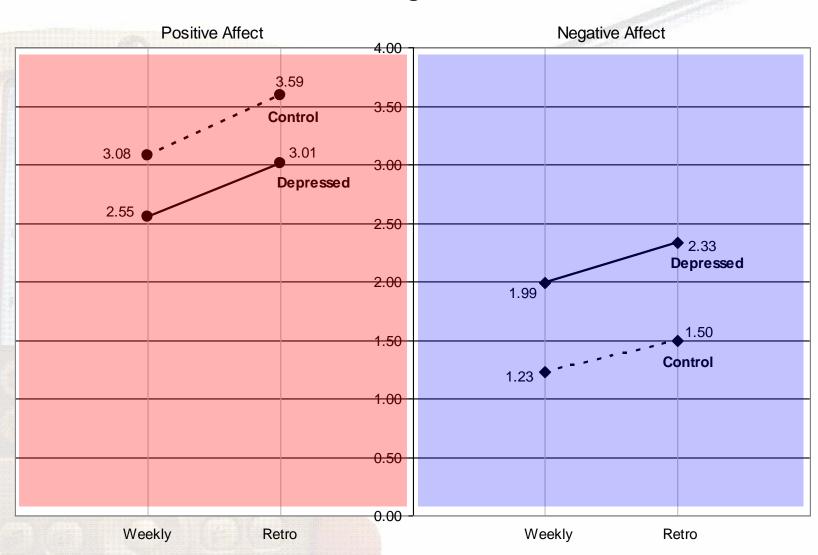
#### Results

#### Number of Individuals in Each Study Phase



#### Results

#### **Mean Affect Ratings Across Measures**



# Key Factors For Success

#### Teamwork

- Equal involvement in IPRO among all members
- Sense of ownership in project
- Talented and motivated individuals

#### Communication

- Open channels of communication
- Email using iGroups
- Telephone calls
- Team meetings with faculty advisor twice every week

#### Project Management

- Creation of sub-teams and delegation of tasks
- Feedback and performance evaluation
- Setting and adhering to deadlines
- Full documentation and thorough organization

#### IPRO Experience Ethical Concerns

- 1. Online ethics training
- 2. Ethical research
  - Informed consent
  - Anonymity
- 3. Adhering to exclusion criteria
  - IIT affiliates
  - Multiple participants per household
  - Out of range BDI scores
  - Comorbidity

## Acknowledgements

- Special Thanks To:
  - Mr. Dror Ben-Ze'ev & Dr. Michael Young
  - IPRO Office & Mr. Tom Jacobius
  - Institute of Psychology

"I learned that positive and negative criticism have equal importance" -Stephanie

#### **Questions?**

"I learned to have patience. Timeliness is not a common virtue

"I 'learness swiesan'tos el reming obstacles and achieving your gaals neithier is problems by using the same kind of thinking we used when we created them."

**IPRO 306** 

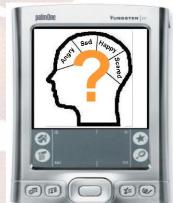
communication." -Chelsea

- Tarek

#### Enhancing Psychology Research Through **Advanced Communications Technology**

"Perseverance is the key to reaching any goal." -Vlad

"I learned that my talent can get me far, but only with focus and discipline will I soar." -Kevin



"I learned a lot from taking the leadership role on recruitment tasks."

-Tina

"By maintaining professionalism a group can function better and everyone will respect you." -Krystin

"Don't try to recruit in a jail health center." -Chris