IPRO EXPERIENCE

Tarek Abou-Nemeh • Biology • Senior
Most Valuable Lesson: We have two ears and one mouth so that we can listen twice as much as we speak. I learned to listen to and respect one another.
Favorite Moment: Interacting with participants; Dror's expression while looking at Captain Chris' picture & too many jokes to fill this space with.

Tina Chiu • Psychology • Junior
Most Valuable Lesson: Taking a leadership role by leading the recruitment assignments.
Favorite Moment: Talking about operation perfect storm... and when we had pizza and Krystin's brownie-cookies.

Kevin Franke • Psychology • Junior
Most Valuable Lesson: I learned that my talent can get me very far, but only with focus and discipline can I truly soar. I also learned to not drink liquid coffee creamer that has been unrefrigerated for many hours.
Favorite Moment: Looking at the final results of the statistical analysis of our hard-earned data.

Krystin Hernandez • Political Science • Senior
Most Valuable Lesson: Always be extra professional around people, even if they are your peers. By maintaining professionalism a group can function much better and everyone will respect you.
Favorite Moment: Executing Operation Perfect Storm ...in just under 10 hours.

Alice Jacob • Biology • Senior
Most Valuable Lesson: No matter what you plan for there will always be unpredictable situations that arise; thus, success lies in overcoming all these obstacles and achieving your goals.
Favorite Moment: Taking down the signs to the mood lab.

Chris Jones • Psychology • Junior
Most Valuable Lesson: Don't try to recruit participants in a jail health center.
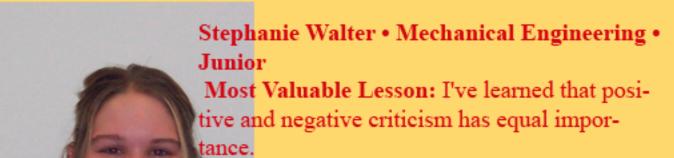**Favorite Moment:** When my question was answered With a picture of me with a captain's hat on.

Chelsea Miller •Architecture • Junior
Most Valuable Lesson: Patience. Timeliness is not a common virtue and neither is communication. Most situations are remedied by staying calm.
Favorite Moment: Nearly every moment, but also the pizza party celebrating the conclusion of the study. Not only was the project complete but I enjoyed relaxing with the team. It is a great group of hard-working individuals who also know how to have fun.

Vlad Vilenchik • Information Tech & Management • Senior
Most Valuable Lesson: Perseverance is the key to reaching any goal.
Favorite Moment: I was lucky enough to be there with Dror and Kevin when our first participant showed up last November. This was my favorite moment, because we were finally on our way towards reaching our goal. It was just a start, but without a start there is no finish. It was almost as if I was a part of history.

Stephanie Walter • Mechanical Engineering • Junior
Most Valuable Lesson: I've learned that positive and negative criticism has equal importance.
Favorite Moment: One day everyone showed up at the office unexpectedly, just to see how things were going. We had a good time laughing and getting to know each other better while waiting for participants. It really showed how much motivation everyone had for the project.

PDA • ESM • Freshman
Most Valuable Lesson: Don't plug me in during the week.
Favorite Moment: Being called 'pesky'

Recruitment Sub-team
Team Leaders: Tina Chiu, Vlad Vilinchik
Team Members: Entire Team
Description: This sub-team was responsible for advertising to recruit volunteers. During the first semester of the project, the Recruitment sub-team compiled a master list of all locations to advertise, which were then grouped into three tiers according to distance from campus. The first tiers was covered during the first semester, and Vlad and Tina made sure the second tier was covered by the team from January 22nd-27th. The actual advertising was performed by all members of the IPRO team and not just to sub-team. The recruitment was extended in early February to satisfy the team's goal of collecting data as quickly and efficiently as possible. The extended recruitment period ended on February 27th.

Technical Support Sub-team:
Team Leader: Chris Jones
Team members: Entire Team
Description: This sub-team was responsible for maintaining the best performance of PDAs and other lab equipment. The entire team made sure participants did not have troubles with PDAs and, if any were encountered, the participant was immediately contacted and the problems were solved.

Project Plan/Midterm Report/Final Report Sub-team:
Team Leader: Kevin Franke
Team members: Tarek Abou-Nemeh, Chris Jones, Alice Jacob
Description: This sub-team was responsible for creating and submitting the IPRO deliverables listed above on time. This team will work together to have a rough draft of each document available for the rest of the team at least a week prior to the due date to allow time to receive feedback for possible improvements.

Presentation Sub-team
Team Leader: Tarek Abou-Nemeh
Team members: Tina Chiu, Kevin Franke, Chris Jones
Description: This sub-team is responsible for preparing and performing the team's presentation on IPRO Day. This team will work together to have a first draft of the presentation prepared well before IPRO Day to allow time to receive feedback for possible improvements. Tarek is also responsible for organizing times for the team to practice the presentation sufficiently before IPRO Day.

Data Management Sub-team:
Team Leader: Tarek Abou-Nemeh
Team members: Tina Chiu, Alice Jacob, Stephanie Walter, Kevin Franke
Description: This newly developed sub-team was responsible for the collection, organization, formatting, and entry of all data collected throughout project. The product of this team's labor was a complete, error-free set of all the data collected in the research study, ready for analysis.

Exhibit/Poster/Abstract/Brochure Sub-team:
Team Leader: Chelsea Miller, Krystin Hernandez
Team members: Entire Team
Description: This sub-team is responsible for creating and submitting the IPRO deliverables listed above. This team will work together to have rough drafts of each project available for the rest of the team at least a week prior to the due date to allow time to receive feedback for possible improvements.

Teamwork and Problem Solving
Due to effective communication, smart project management, and talented individuals, no problem was too big to overcome.

Problem	-------------	Solution
Low efficiency in the Mood Research Lab	----------	Create a three hour per week shift system
Team members only specialized in some tasks	----------	Train and evaluate team's competency in all areas
Malfunctioning PDAs	----------	PDA troubleshooting team and 48hr check-up calls
Inclement weather	----------	Contact participants and stay warm
Mood Research Lab space limitations	----------	Acquire two additional offices
Participant punctuality and no-shows	----------	Required reminder phone calls
Participants with disabilities	----------	Accommodate their needs

Advisor: Dror Ben-Ze'ev, M.S.

Advisor: Michael Young, Ph.D.

BACKGROUND

Major Depressive Disorder is an extremely depressed mood state that lasts at least 2 weeks, contains 5 of these 9 criteria, and must have the first 2 features.
- Depressed mood for most of the day
- Diminished interest or pleasure in almost all activities
- Significant weight gain or weight loss
- Insomnia or hypersomnia (excessive sleep)
- Psychomotor agitation or retardation
- Fatigue or loss of energy everyday
- Feelings of worthlessness or inappropriate guilt
- Diminished ability to concentrate or indecisiveness
- Recurrent thoughts of death

What Is Affect?

Affect: The subjective feeling component of emotion or mood, accompanied by a form of facial, behavioral, or verbal expression; basically, your "feelings"

Positive Affect (PA): Subjective states of excitement, attention, enthusiasm, pride, determination, and strength

Negative Affect (NA): Subjective states of distress and unpleasant experience, including anger, contempt, disgust, guilt, fear, and nervousness

Retrospective Recall: Recollection of previously experienced affect

Technology Meets Psychology

Experience Sampling Method (ESM)
ESM uses an electronic signaling device to instruct participants to report their current experiential states in their own natural environment.

Personal Digital Assistant (PDA)
PDAs are handheld digital computers. IPRO 306 decided that PDAs would be the best device for gathering self-reports of affect from participants. In fall 2006, they obtained fifteen PALM PDAs for use in the study.

Experience Sampling Program (ESP)
ESP is an open-source software program allowing the user to customize their own ESM study; including survey questions, duration of study, times to alert the user, response time, etc.

Positive Affect/Negative Affect Survey (PANAS)
The PANAS is a twenty item survey, with one half measuring PA levels and the other measuring NA levels. The user is presented with a descriptor item such as "excited," "nervous," "ashamed," or "interested," and are prompted to answer on a five point scale how they feel that way (1 is very slightly; 5 is extremely).

PURPOSE

The overall purpose of IPRO 306 is to investigate the patterns and accuracy of retrospective recall of affect in the clinically depressed.

OBJECTIVES

- Recruit 25 healthy and 25 depressed volunteers from Chicago area
- Collect usable data from each eligible volunteer
- Implement a shift-system for lab work
- Train each team member in lab skills
- Solve any malfunctioning PDA problems
- Organize, enter, and analyze data and draw meaningful conclusions

METHODOLOGY

- Obtain momentary mood ratings for an entire week:
  - Participants complete a mood survey eight times a day during the hours of 9:00am to 10:00pm for seven days
  - They are instructed to fill out the surveys exactly how they feel at the current moment
- Obtain a retrospective mood rating at the end of the week:
  - Participants fill out the same mood survey, but are instructed to fill it out how they felt during the last week
- The average momentary reports can be compared with the retrospective report to analyze any patterns or trends in retrospective recall
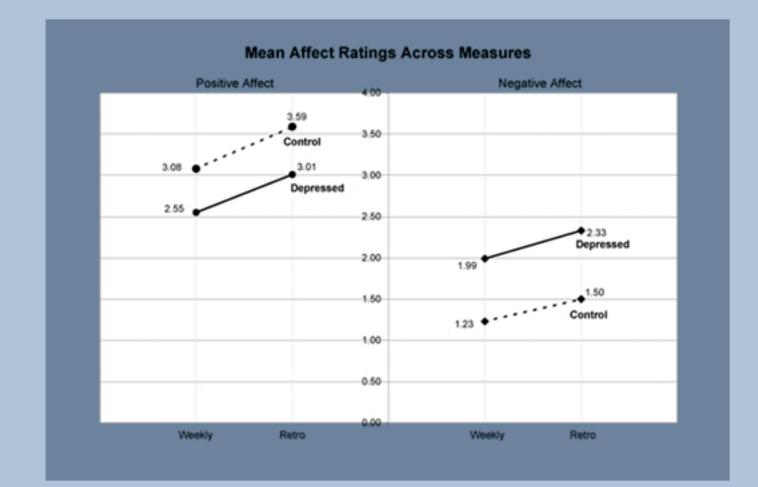
ETHICAL CONSIDERATIONS

Certification: All members on the team completed the "Human Participants Protection Education for Research Teams" course offered online by the National Cancer Institute. After completing the program, which educated the team on the current standards of ethical research methods, all team members were eligible to participate as research assistants in this study.

Informed Consent: All participants were given a consent form informing them of their rights and what was expected of them for their participation in the study. No participation or exchange of personal information on any level was allowed until the volunteer gave full consent.
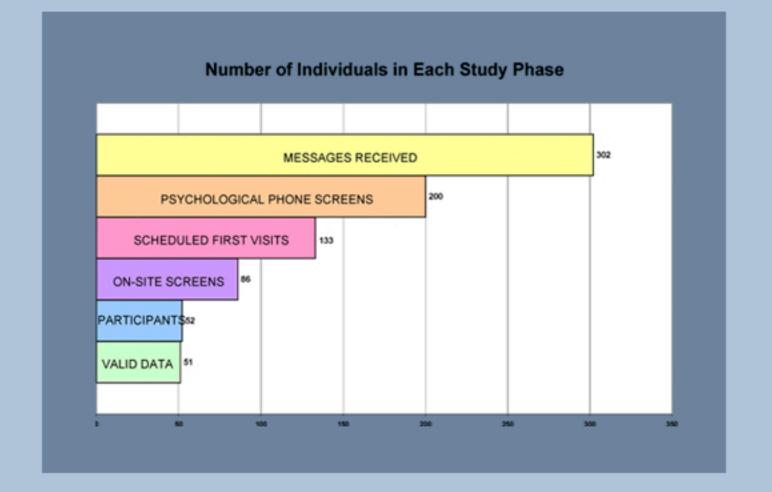
Personal Information: Participants were not required to provide any information that did not have a specific purpose to the research study. All personal information given to the research team was locked up in the Mood Research Lab. Participants were assigned a code number as soon as they were accepted into the study; this code was then their only form of identification.

RESULTS

The first graph demonstrates that in both groups, control and depressed, for both positive and negative affect the participants exaggerated their emotions during recall.

The second graph illustrates the number of people that began our screening process, and number of people that were eliminated through each stage of our screening process.

SPONSOR

We would especially like to thank Tom Jacobius from the IPRO office for all of his assistance throughout our IPRO experience.