**Teamwork and Problem Solving**

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

**Problem**

- Low efficiency in the Mood Research Lab
- Team members only specialized in some tasks
- Malfunctioning PDAs
- Inconsistent weather
- Mood Research Lab space limitations
- Participant punctuality and no-shows
- Participants with disabilities

**Solution**

- Create a three-hour per week shift system
- Train and evaluate team's competency in all areas
- PDA troubleshooting team and 48hr check-up calls
- Contact participants and stay warm
- Required reminder phone calls

**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 most 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

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