

Wharton Behavioral Laboratory¹ Annual Report for Calendar Year 2007

Summary

The Wharton Behavioral Laboratory (WBL) in its current form began in Fall 2004 and received official funding from Wharton in Spring 2005. The initial proposal estimated that the research volume of the lab would range between 5,000 and 14,000 participant hours annually (with the lower number being the volume at that time from various subject pools). In the first year, actual volume exceeded those estimates and a SHDH location was added to the JMHH location. In 2007, the volume was 14,996 participant hours for student samples (which is approximately the same as 2006) and 530 participant hours for non-student samples (which is slightly lower than for 2006). The lab was used by 55 faculty, visitors, and graduate students (27, 3, and 25, respectively). Marketing was the heaviest user (14 faculty, 1 visitor, 10 graduate students, and 73% of student-sample lab time). Management (3 faculty, 2 visitors, 4 graduate students, and 11% of student-sample lab time) and OPIM (7 faculty, 5 graduate students, and 9% of student-sample lab time) used the lab about equally. There was also a small amount of usage as a courtesy to other Penn departments (psychology and medicine) and various guests (e.g., former graduate students)². Our per-participant costs of operation remained about the same as 2006 (discussed below and see Exhibit 2).

This year we compiled a cumulative list of papers and projects to assess contribution to research productivity. The numbers are impressive. Since its inception, the WBL has contributed data to at least 96 research projects. Twenty-two published papers have used data collected in the WBL (8 in 2006, 7 in 2007, and 7 are forthcoming in 2008). Additionally, 39 current working papers have used data collected in the WBL, and there are another 35 research projects that are ongoing or are in the process of being written up. Exhibit 3 provides the complete list.

Goals for 2008

1. Maintain the current high levels of productivity in the student sample labs.
2. Expand ability to deliver non-student samples (e.g., specific consumer samples, non-US samples, APEX, etc.).
3. Increase the number of faculty and graduate students using the WBL.
4. Obtain new sources of financial support for the WBL (e.g., grants and possibly the establishment of an endowment).
5. Increase WBL programming support and use it efficiently and equitably.
6. Implement quality control procedures and expand the participant characteristics database.

¹ Prepared by Professor Wes Hutchinson, Faculty Director. Background information about the WBL is provided in Exhibit 1, including definitions of terms used in this report.

² Typically, courtesy users pay entirely for participant costs, but are not charged for operational costs.

7. Increase experimenter and WBL expertise in online methods (e.g., multi-person, interactive paradigms such as are used in experimental economics, decreased use of paper-and-pencil tasks, etc.).
8. Explore the value of allowing teaching-related use of the WBL, especially non-student samples for project courses.
9. Conduct publishable research on methodological issues uniquely related to our panel structure (e.g., effects of participation rate on data quality, cross-experimental effects, different incentives, comparisons of student and non-student samples).

Student Samples

Data from student samples are collected in JMHH and SHDH. The total volume for 2007 was 14,996 participant hours. Payments per participant hour averaged \$10.41 and operating expenses per participant hour averaged \$12.39. Thus, the fully loaded cost per participant hour was \$22.80. This is a small increase over 2006 (\$19.49) due primarily to the need to increase the use staff RAs rather than student RAs. However, this cost compares well with benchmarks in the marketing research industry.³ Session sample sizes and average completion times are given in Exhibit 4. The number of sessions participated in per panel member and average session completion times are given in Exhibit 5. The number of “heavy participation members” decreased considerably in 2007 compared to 2006. The number of members participating in more than 30 sessions was 8 and the number participating in more than 20 was 89. Those numbers for 2006 were 131 and 245, respectively. This reduction is probably due the increase in panel size and the larger number of members who are disqualified for a given session because they participated in a previous version of one of the studies. The fact that there has been a trend toward more short studies in each session increases the disqualification rate. Average completion times also increased to 34 minutes from 31 minutes in 2006. Exhibit 5 shows that there is a noticeable “speed-up” over the first 5 to 10 sessions and then it levels off. This type of learning effect is observed for almost all types of learning tasks and probably reflects a type of learning that improves data quality by reducing error due to confusion about lab procedures. Also, there is no evidence that the heavy participants become “speed demons” who rush through their tasks. We had hoped to implement more direct quality controls and expand our participant characteristics database this year. However, this process is not yet implemented due to insufficient programming resources (see Programming Support section).

Finally, our WBL staff, headed by Daniela Lejtneker, has provided consistently outstanding service to both experimenters and participants. This is reflected in all experimenter comments that have come my way and the lack of complaints and high satisfaction ratings from participants. I meet with the staff on a weekly basis and am continually impressed at the knowledge that they have gained about research goals and procedures and how to maintain quality control in the lab. Morale is high in the group and the lab runs like a “smooth machine” because of their effort. It is hard to overestimate the value of the staff to the WBL.

³ For example, the per respondent price for multi-client online surveys is \$1 - \$2 per question, and eye-tracking studies cost \$35 per 10 minute interview, including a \$10 incentive, and are priced higher to clients.

Non-Student Samples

Growth in the use of non-student samples was not as high as expected in 2007. The use of standard samples (online and local populations) was down slightly. Progress was made in developing a sample of business executives (i.e., the Wharton Advisory Panel of Executives, APEX; see Exhibit 1). A website was professionally designed and is now close to being fully operational. Also, 9 faculty have committed to developing surveys for the panel. However, this process was greatly slowed by insufficient programming support (see Programming Support section). Susan McMullen has done an outstanding job of working with faculty to obtain non-student samples, and Professor Lisa Bolton has contributed mightily to the APEX initiative. Although demand was light for parts of 2007, it has increased in the first part of 2008. Online panels will be an important resource in the future. In addition to the Australian panel provided by PureProfile (which has been used by several faculty), a U.S. panel is available through Qualtrics and through Professor Jon Baron in Psychology.

Other Initiatives

In addition to the previously discussed executive panel, there were several significant initiatives in 2007. First, a relationship with the online research firm, Qualtrics, has been established in which all Wharton faculty, staff, and students have access to their state-of-the-art survey construction and data collection web-based tools. This provides a very user-friendly method of creating an online survey. Second, the WBL staff conducted focus group interviews with panel members to better understand their needs and behaviors. For the past two summers, the WBL has employed a few high school students as RAs. This provides needed lab coverage as well as a nice learning experience for the student. Third, the lab continues to acquire equipment on an as-needed basis. Web cams for each computer were purchased to support data collection in studies measuring the emotional responses of students. Also, 10 laptop computers were purchased to provide the ability to "supersize" a single location, rather than using both locations, for interactive experimental paradigms that require more than 13 simultaneous participants. Finally, the WBL received a mini-grant to help the Indian School of Business develop a behavioral lab and to explore mutual research arrangements.

Staffing Needs

We propose a modest increase in our budget that will increase our current non-student and IT staff from one 50% time person in each role to one full time person in each role. Our student sample staff will also be reorganized to convert two current part time positions into one full time position. We believe the IT position is the key. The problem this year has been that programming projects designed to improve the web-based infrastructure of the WBL were continually deferred in order to address more immediate needs to support specific experiments (and other IT needs). Basically, when experimental programs are not ready or develop problems on the first day of a session, they must be fixed or the session time is lost. Young Lee has done a great job of making sure that lab programs run, but it has come at the expense of infrastructure projects. Doubling his time available to the WBL should help. We desperately need to improve the web-based infrastructure of the WBL and this goal, which benefits all experimenters, needs to be the highest priority. The second priority is training graduate students to program their own experiments. This is both efficient and essential for our students to maintain continuity in their research after they graduate. The third priority is program development projects for specific

experimenters. An equitable policy of for using WBL resources to supplement experimenter resources needs to be developed. Experimenters should consider applying for grants, and it may be useful for WBL staff to develop skills in facilitating these applications. Also, there is the possibility of building an endowment. We should actively explore these options in 2008.

Exhibit 1

Wharton Behavioral Laboratory Background Information

The Wharton Behavioral Laboratory (WBL) provides a variety of services that support data collection for behavioral research on business-related topics. The primary goal is to enhance the research productivity of Wharton faculty by minimizing the operational costs, both time and money, of conducting research. The primary services provided are maintaining and updating facilities, participant pools, and staffing for a state-of-the-art experimental research laboratory that will be a shared asset for all faculty and students doing behavioral research. It contributes to Wharton's reputation for excellence in academic research and enhances our ability to attract and retain the very best faculty and students. The WBL operates two lab locations, and members of the WBL panel are mainly Penn students, but also include staff and members of the community. Each session lasts 30 to 60 minutes. During a session panel members may complete questionnaires, participate in online experiments, or interact in groups. Payment for each session is usually \$10, but may exceed that amount for studies in which payment depends on performance in some way. Members report that most of the studies are interesting. Each lab begins a new session every week. The lab manager coordinates with faculty to schedule the experiments in each session, to estimate needed time, to understand the experimental procedures used. Typically, on the first day of each session the lab manager and experimenters are present in the lab to train the staff and student RAs, to observe the procedures, and to correct any problems that arise. On subsequent days, the labs are run by the RAs.

The Wharton Advisory Panel of Executives (APEX) is a new initiative. The primary goal of APEX is to provide an ongoing, accurate, up-to-date description of executive opinions and facts about the current business environment using a survey method that creates a sense of “dialogue” between participants and Wharton faculty (and the larger business community). Initially, the panel will be a group of 500-1000 business executives who are surveyed online regularly about a wide variety of business issues. Each survey will take 5-10 minutes to complete, and the typical panel member will participate in 1 or 2 surveys each month. Although not a probability sample, members will be representative of the industries and organizational structures of the global business community, and rigorous survey methods will be employed to maintain a high level of data quality. The survey topics will include best practices, “hot topics,” and focused research problems. The results of this research will be summarized by Wharton faculty and made available to panel members online (e.g., on web pages, PDF download, pod casts, etc.) in advance of their being reported in academic journals or business media. Survey questions will address issues of general interest to executives, of specific relevance to courses taught at Wharton, and of value to research projects being conducted by Wharton faculty. In addition to contributing to important business research, panel members will have early, exclusive access to the results of the studies. APEX members provide a critical industry perspective on important business problems. The knowledge derived from APEX research will ultimately be disseminated through academic and business journals and in the popular press, giving APEX members an opportunity to influence important business issues. Additionally, APEX members earn points for their participation in research studies. Similar to how airlines, hotels and credit card companies reward their best customers, APEX members can redeem their points for valuable rewards, from Wharton merchandise and books to participation in Wharton Executive Education Programs.

WBL Terminology:

A *session* is a group of experiments that are (were) run at the same time in the same location. It is also the series of time slots allocated to those experiments. Each session has a unique ID in all databases (e.g., 062305).

An *experiment* is a self-contained data collection event. Each experiment has a unique ID in all databases (e.g., 062305E1).

A *time slot* (or *slot*) is a specific time period during which a specific subject can (did) participate in a session. Each slot has a unique ID in all databases (e.g., 062305-01).

An *experimenter* is the person (usually faculty or graduate student) who is primarily responsible for an experiment. Each experimenter has a unique ID in all databases (which is the same as the Wharton ID, e.g., jwhutch).

A *subject* or *participant* is a person who participates in one or more sessions. In most cases, a subject will participate in all experiments in a given session; however, there can be exceptions to this (e.g., subjects may qualify for some, but not all, experiments, or the session structure dictates that subjects participate in only 2 of 3 experiments in the session). Each participant has a unique ID in all databases (which will be an integer number assigned when the person registers).

A *panel* or *participant pool* is a group of participants that have registered with WBL and may qualify participation in experiments. People may be dropped from the panel by their own request or because of unsatisfactory performance in lab sessions.

Participant characteristics are variables attached to each subject as single values. These may change over time, but the database has only one observation for each subject.

Experiment characteristics are variables attached to each as single values. These may change over time, but the database has only one observation for each experiment.

Participants *qualify* for experiments (and sessions) based on rules defined in terms of subject and experiment characteristics.

Exhibit 2**Cost Analysis**

(Confidential; not available in this document)

Exhibit 3

Cumulative List of Papers and Research Projects

Published Papers:

2008

- Bolton, Lisa E., Americus Reed II, Kevin G. Volpp, and Katrina Armstrong (2008), "How Does Drug and Supplement Marketing Affect a Healthy Lifestyle?", *Journal of Consumer Research*, forthcoming.
- Chen, Yuxin, Yogesh Joshi, Jagmohan S Raju and John Zhang (2008), "A Theory of Combative Advertising," *Marketing Science* (forthcoming).
- Huang, Yanliu and J. Wesley Hutchinson (2008), "Counting Every Thought: Implicit Measures of Cognitive Responses to Advertising," *Journal of Consumer Research*, 35 (June).
- Miller, E. G., B. E. Kahn and M.F. Luce (2008), "Consumer Wait Management Strategies for Negative Service Events: A Coping Approach," *Journal of Consumer Research*.
- Redden, Joseph (2008), "Reducing Satiations", *Journal of Consumer Research*, Feb.
- Small, D.A. & Simonsohn, U. (in press). Friends of victims: Personal experience and prosocial behavior. *Journal of Consumer Research*.
- Verona, Edelyn, Naomi Sadeh, Steve Case, Americus Reed II and Amit Bhattacharjee (2008), "Self-Reported Use of Different Forms of Aggression in Adolescence and Young Adulthood: Validation and Correlates." Forthcoming in *Assessment*.

2007

- Cohen-Charash, Y, & Mueller, J. S. (2007). Does unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? *Journal of Applied Psychology*, 92, 666-680.
- Drolet, Aimee, Patti Williams and Loraine Lau-Gesk (2007), "Age-Related Differences in Responses to Emotional vs. Rational Ads for Hedonic vs. Utilitarian Products," Lead Article, *Marketing Letters*, 18 (December), 211-221.
- Fitzsimons, Gavan J., Joseph Nunes and Patti Williams (2007), "License to Sin: The Liberating Role of Reporting Expectations," *Journal of Consumer Research*, 34 (June), 22-31.
- Moore, D.A. & Small, D.A. (2007). Error and bias in comparative social judgment: On being both better and worse than we think we are. *Journal of Personality and Social Psychology*, 92(6), 972-989.
- Ramanathan, Suresh and Patti Williams (2007), "Immediate and Delayed Emotional

Consequences of Indulgence: The Moderating Influence of Personality Type on Mixed Emotions,” *Journal of Consumer Research*, 34 (August), 212-223.

Small, D.A., Gelfand, M., Babcock, L., & Gettman, H. (2007). Who goes to the bargaining table? Understanding gender variation in the initiation of negotiation. *Journal of Personality and Social Psychology*, 93(4), 600-613.

Small, D.A., Loewenstein, G., Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102(2), 143-153.

2006

Bolton, Lisa E., and Joseph W. Alba (2006), "Price Fairness: Good and Service Differences and the Role of Vendor Costs," *Journal of Consumer Research*, 33 (September), 258-265.

Bolton, Lisa E., Joel B. Cohen, and Paul N. Bloom (2006), "Does Marketing Products as Remedies Create "Get Out of Jail Free Cards"?", *Journal of Consumer Research*, 33 (June), 71-81.

Nunes, Joseph C. and Xavier Drèze (2006), "The Endowed Progress Effect: How Artificial Advancement Increases Effort," *Journal of Consumer Research*, 32 (4), 504-12.

Schweidel, David, Eric T. Bradlow, and Patti Williams (2006), "A Feature-Based Approach to Assessing Advertisement Similarity," *Journal of Marketing Research*, 43 (May/2), 237-243.

Schweitzer, M., Hershey, J., and Bradlow, E.T. (2006), "Promises and Lies: Restoring Violated Trust," *Organizational Behavior and Human Decision Processes*, Issue 1, September, Pages 1-19, Lead Article.

Sood, Sanjay and Xavier Drèze (2006), "Brand Extensions of Experiential Goods: Movie Sequel Evaluations," *Journal of Consumer Research*, 33 (3), 352-60.

Vanhuele, Marc, Gilles Laurent, and Xavier Drèze (2006), "Consumers' Immediate Memory for Prices," *Journal of Consumer Research*, 33 (2), 163-72.

Williams, Patti, Lauren G. Block and Gavan J. Fitzsimons (2006), "Simply Asking Questions About Health Behaviors Increases Both Healthy and Unhealthy Behaviors," *Social Influence* 1 (2, June), 117-127.

Working Papers:

Barsade. S, Eylon. D, Goethals G.R. and Perl, R. (2008) "Is silence golden? Attributions of silence and its effects in a negotiation context."

- Barsade, S., Ramarajan, L. and Allred, K. (2005). "Cynicism or Benevolence?: The role of positive and negative acts on our work place attributions."
- Berger, Jonah and Winter Mason (2008), "How Culture Spreads: Identity-Signaling, Social Networks, and the Diffusion of Culture"
- Bolton, Lisa E. (2006), "Believing in First Mover Advantage." Under 1st round revision for Marketing Science.
- Bolton, Lisa E., and Joseph W. Alba (2007), "When Less is More: Consumer Aversion to Waste." Under 1st round revision for the Journal of Consumer Research.
- Bolton, Lisa E., Hean Tat Keh, and Joseph W. Alba (2007), "Culture and Marketplace Effects on Perceived Price Fairness: China and the USA." Funded by the Guanghua-Wharton Joint Research Initiative on Firms and Markets in China. Under 1st round revision for the Journal of Marketing Research.
- Deng, Xiaoyan and Barbara E. Kahn (2007), "Is Your Product on the Right Side? The 'Location Effect' on Perceived Product Heaviness and Package Evaluation,"
- Deng, Xiaoyan and J. Wesley Hutchinson (2007), "A Form-Function-Elaboration Model of Consumer Responses to Product Design: The Effects of Visual Metaphors,"
- Deng, Xiaoyan and J. Wesley Hutchinson (2008), "Just Do It Yourself: The Roles of Outcome Accuracy, Process Affect, and Pride of Authorship in the Evaluation of Self-Designed Products,"
- Eisenstein, E. and S.J. Hoch (2007), "Intuitive compounding: Framing, temporal perspective, and expertise", (working paper).
- Filipowicz, A, Barsade, S. & Melwani, S. (2008), The Criticality of Change: Affective Transitions in Negotiations
- Finnel, Stephanie, Americus Reed, II, Karl Aquino, and Stefan Thau, "Consuming War: The Case of Dueling Identities," To be submitted 9/2008 to Journal of Consumer Research (3rd Review). Data collected in 2007.
- Huang, Yanliu and J. Wesley Hutchinson (2008), "There is More to Planned Purchases than Knowing What You Want: Dynamic Planning and Learning in Consumers' Store Choice Behavior," Working paper.
- Huang, Yanliu and Robert J. Meyer (2008), "Tradeoffs in the Dark: The Algebraic Structure of Extrapolated Consumer Preference Functions," Working paper.
- Huang, Yanliu, Sam Hui, and Barbara Kahn (2007), "Health Communication Effectiveness: Using Underlying Processes to Understand the Relationship between Risk Attitudes and Behavioral Intentions," Working paper.

- Hui, Sam, Yanliu Huang, and Edward George (December 2007), "Model-based Analysis of Concept Maps in Marketing," Under Review at Bayesian Analysis.
- Kunreuther, H, Silvasi, G., Bradlow, E.T., and Small, D. (2007), "Deterministic and Stochastic Prisoner's Dilemma Games: Experiments in Interdependent Security", Working Paper.
- Lee, Michelle, Barbara Kahn and Susheela Varghese: "Retrospective Preference for Variety: An Ease of Retrieval Perspective"
- Lee, T.Y., and Bradlow, E.T. (2007), "Automatic Construction of Conjoint Attributes and Levels From Online Customer Reviews", Working Paper
- Malkoc, Selin, Gal Zauberaman, and James R. Bettman. (2008) Unstuck from the Concrete: Carryover Effects of Abstract Mindsets in Intertemporal Preferences. Working Paper. (Under 2nd revision, Journal of Consumer Research).
- Melwani, S. & Barsade, S. (2008), Held in contempt: The interpersonal effects of contempt in a work setting.
- Mueller, J. S. & Overbeck, J. R., Melwani, S. (2008) Emotional Expression and Status Conferral.
- Passyn, Kirsten , Mary Frances Luce and Barbara Kahn, "Effectiveness of Regret-Based Persuasive Appeals for Motivating Adaptive Coping Behavior" at Journal of Consumer Research.
- Ramarajan, L. (2007) "Who am I? The Influence of Multiple Intrapersonal Identities on Interpersonal Problem Solving."
- Redden, J. and S.J. Hoch (2008), "The Psychology of Two-Part Tariffs," (working paper)
- Reed II, Americus, Joel Cohen, and Amit Bhattacharjee, "When Brands are Built from Within: Implications of a Social Identity Pathway to Evaluation." (chapter to appear in *Handbook of Brand Relationships*, Eds. Deborah MacInnis, Chan Ho Park, and Joseph Priester, M.E. Sharpe).
- Reed, II, Americus, Eric Levy, Karl Aquino, and Stephanie Finnel (2008) "Giving Time versus Money: A Social Identity Perspective".
- Small, D.A. (2007). Reference-dependent sympathy.
- Small, D.A. & Verrochi, N.M. (2007). The face of need: Emotion expression on charity advertisements.
- Subramanian, Upender, Jagmohan S. Raju, Z. John Zhang (2008), "Customer Value-Based Management: Competitive Implications"

- Verrochi, Nicole M. (2008), "Fit Theory: Towards an Understanding of Judgments and Evaluations of Fit"
- Verrochi, Nicole M. and Americus Reed, II (2008), "Brand Alliances: When Do Consumers (Not) Fit?" in preparation
- Wang, Wenbo, Hean Tat Keh, and Lisa E. Bolton (2007), "Health Remedies: >From Perceptions to Preference to a Healthy Lifestyle." Under 1st round revision for the Journal of Consumer Research.
- Williams, Patti and Jennifer Aaker (2008) "Reflections of Reality: Mixed Emotions and Perceptions of Verisimilitude."
- Williams, Patti and Kirsten Grasshoff (2008) "Layered Not Stirred: Negative Mixing for Emotional Intensity."
- Zauberman, Gal, B. Kyu Kim, Selin Malkoc, and James R. Bettman. Discounting Time and Time Discounting: Subjective Time Perception and Intertemporal Preferences. Conditionally accepted, Journal of Marketing Research.
- Zauberman, Gal, Jonathan Levav, Kristin Diehl, and Rajesh Bhargave. 1995 Feels so Close Yet so Far: The Effect of "Event Markers" on the Subjective Feeling of Elapsed Time. Working Paper. (Under 1st revision, Psychological Science).
- Zauberman, Gal, Rebecca K. Ratner, and B. Kyu Kim. Memories as Assets: Strategic Memory Protection in Choice over Time. Working Paper. (Under 2nd review, Journal of Consumer Research).
- Zhao, Min, Steve Hoeffler, and Gal Zauberman. Mental Simulation and the Evaluation of New Products: The Affective and Cognitive Dimensions of Process- Versus Outcome-Focused Thoughts. Working Paper. (Under 1st revision, Journal of Consumer Research).

Current Projects:

- Bhargave, R. (2008), "The Role of Stimulus Novelty in Expectations for and Evaluations of Consumption Experiences"
- Bhargave, R. and Small, D. (2008), "Advice Taken but not Followed: Vividness, Identifiability and Word-of-Mouth Behavior."
- Bhargave, R. and Small, D. (2008), "The Role of Resolution of Emotional Goals in Memory for Discrete Emotions" with Deborah Small.
- Bhargave, Rajesh, Stephanie Finnel, Nicole M. Verrochi, Neela Saldanha and Deborah A. Small (2008), "Sweating the Small Stuff"
- Bhattacharjee, Amit, Lisa Bolton, and Americus Reed II, "The Effects of Drug and Supplement Marketing on a Healthy Lifestyle." (data collected 2005 - 2007)

- Bhattacharjee, Amit, and Jonah Berger, "When Costliest is Best: Identity and Costly Signaling Theory."(data collection in progress)
- Deng, Xiaoyan and Barbara E. Kahn (2008), "Associative and Rule-Based Processing of Product Image Location on Package Façade"
- Deng, Xiaoyan and J. Wesley Hutchinson (2008), "From Self-Design to Co-Design: The Value of Consumer Collaboration"
- Deng, Xiaoyan and Barbara E. Kahn (2008), "Consumer Responses to Visual Packaging Cues: A Strategic Framework"
- Deng, Xiaoyan, Sam Hui and J. Wesley Hutchinson (2008), "Balancing Consumer Self-Design with Automated Expert Guidance"
- Finnel, Stephanie and Americus Reed II (2008), "Finding Ways to Prime Patriotism and Nationalism," with. Data collected in 2007.
- Finnel, Stephanie, Dan Ariely and Gal Zauberman (2008), "Exploring the Boundaries of Self-Deception: An Assessment of the Situational Variables that Enable People to Believe What They Want to Believe," Data collected in February 2008.
- Finnel, Stephanie, Deborah Small and Gal Zauberman (2008), "Regretting Resource Use: Consumer Responses to the Waste of Time, Money, and Other Valued Resources," Data collected in 2008.
- Finnel, Stephanie, Eric Bradlow and Americus Reed II (2008), "Rationalization of Behaviors that Hurt Others," Data collected in 2007.
- Lin, F., & Small, D. (2008), "Dominance of Visual over Somatosensory Systems in Representing the Future."
- Mueller, J. S. Lebel, D. (2008), Does asking for help aid or hinder network tie formation?
- Ramarajan, L. & Barsade, S. (2005). "Service with a Snub: Using Shame to Gain in the American Wedding Dress Industry."
- Rick, Scott, Deborah Small, and Eli Finkel (2008), "When Tightwads and Spendthrifts Attract"
- Saldanha, Neela, Nicole M. Verrochi and Deborah A. Small (2008), "Disgust and the Brand: When Extensions are Revolting"
- Saldanha, Neela and Patti Williams (2008), "Mixed Indulgences - Consumer Perceptions, Evaluations and Choice."
- Sanchez-Burks, J., Filipowicz, A., & Huy, Q. (2008). Emotional Aperture: Convergent and Divergent Validity.

- Verrochi, Nicole M. and Americus Reed, II (2008), "Self Expression and Need for Reinforcement (SENSOR): A Dynamic Process of Relationship Fit"
- Verrochi, Nicole M., Americus Reed, II, and Jennifer Tong (2008), "Moral Identity and Attributions of Corporate Social Responsibility"
- Verrochi, Nicole M., Deborah A. Small, Amy J. C. Cuddy and Michael I. Norton (2008), "Cross-Race Emotional Contagion"
- Williams, Patti "Emotional Contagion in Word of Mouth," (2008), (with Andrea Morales and Loraine Lau- Gesk), *Data Collection in Progress*
- Williams, Patti, and Kyu Kim (2008), "Consumer Responses to Feelings of Loneliness," *Data Collection in Progress*
- Williams, Patti, Gavan Fitzsimons and Eugenia Wu (2008), "Coping with Mixed Emotions," *Data collection in progress*
- Williams, Patti, Gavan Fitzsimons and Neela Saldanha (2008), "No Regrets: How Intentions Questions License Sinful Behaviors," *Data collection in progress*
- Williams, Patti, Gavan Fitzsimons and Nicole Verrochi (2008), "Emotional Responses to Stock-outs," *Data Collection in progress*
- Williams, Patti, Neela Saldanha and Lauren Block (2008), "Consumer Responses to Removing Sin from Hedonic Products," *Data Collection in Progress*
- Williams, Patti, with Joe Redden and Gavan Fitzsimons (2008), "Price Partitioning: No One Likes Surprises," *Manuscript in Preparation*
- Zauberman, Gal and John G. Lynch (2008), Perceived Slack and Intertemporal Preferences. [Data collection and analysis in progress.]
- Zauberman, Gal, Kyu Kim (2008), Subjective Time Perception and Prospective Evaluations. [Data collection and analysis in progress.]
- Zauberman, Gal, Kyu Kim and Rebecca Ratner (2008), Preserving Memories through Choice. [Data collection and analysis in progress.]
- Zauberman, Gal, Kyu Kim and Selin Malkoc (2008), The Role of Mental Representation in Intertemporal Preferences. [Data collection and analysis in progress.]

Exhibit 4

Session Sample Sizes and Average Minutes per Participant

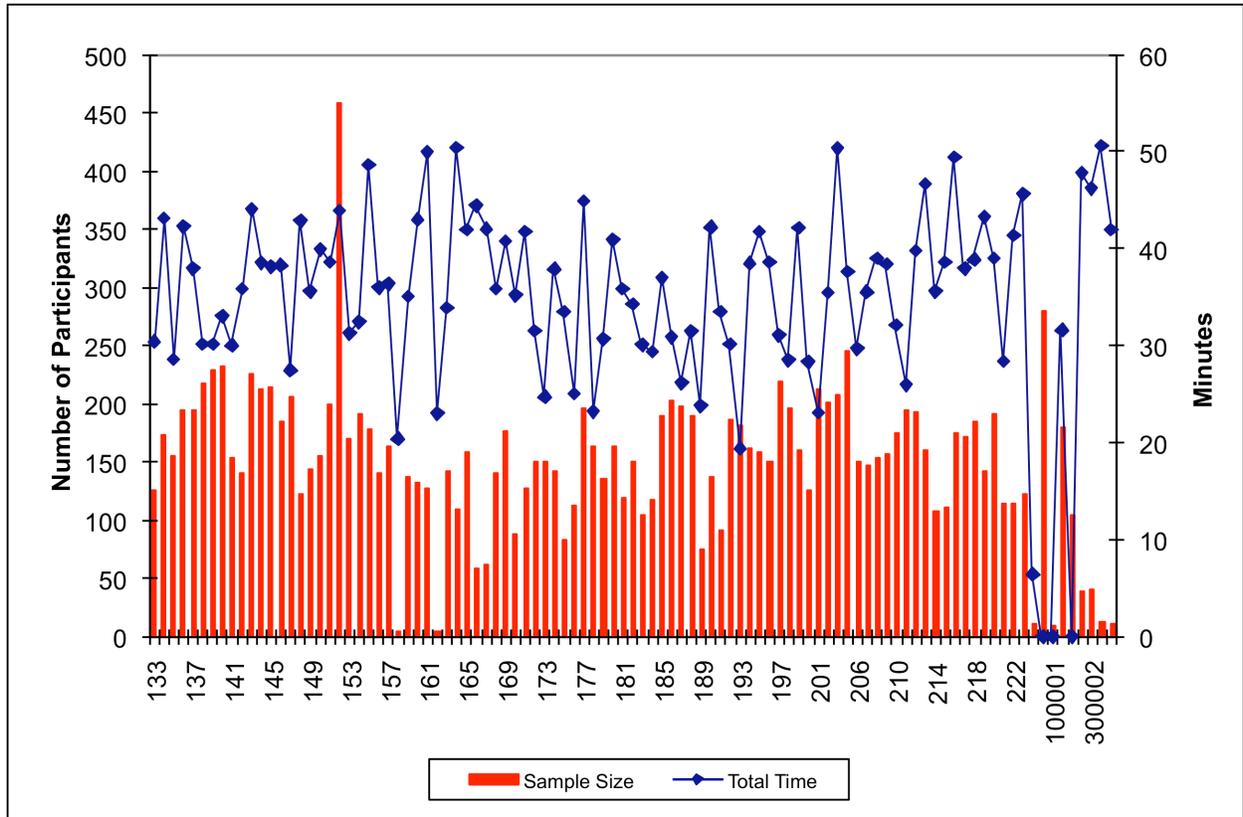


Exhibit 5

Number of Sessions per Panel Member and Average Session Completion Times

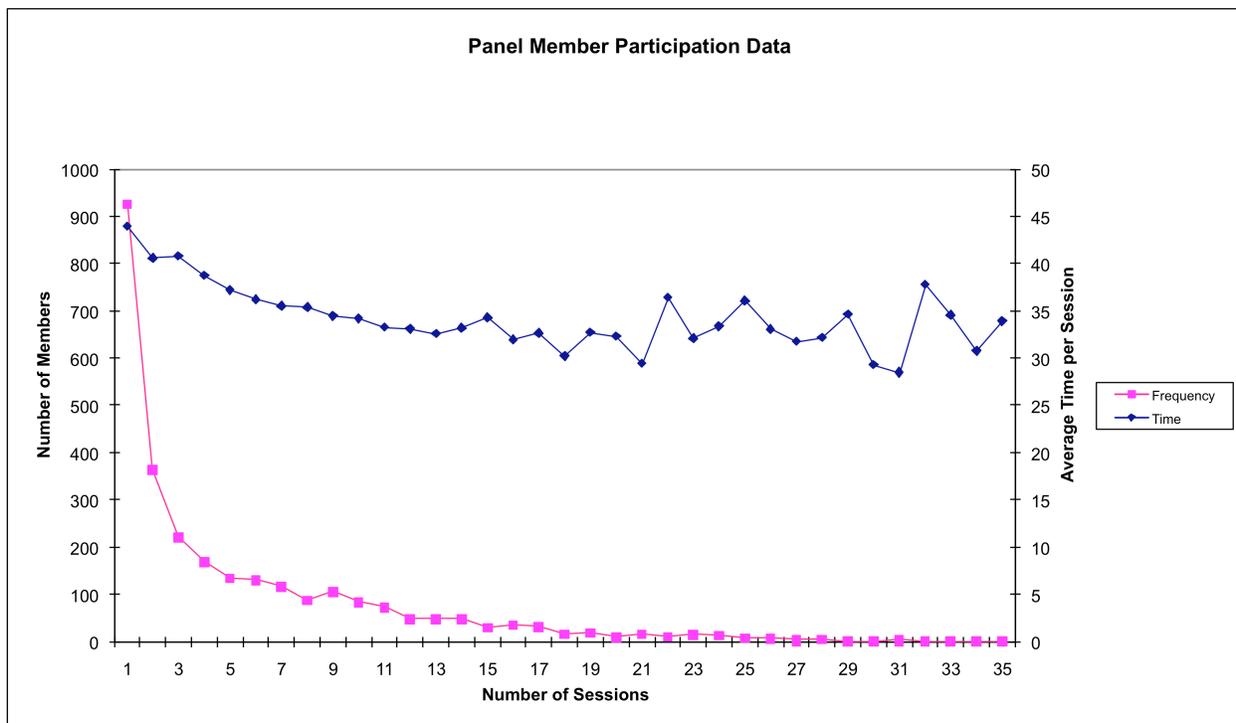
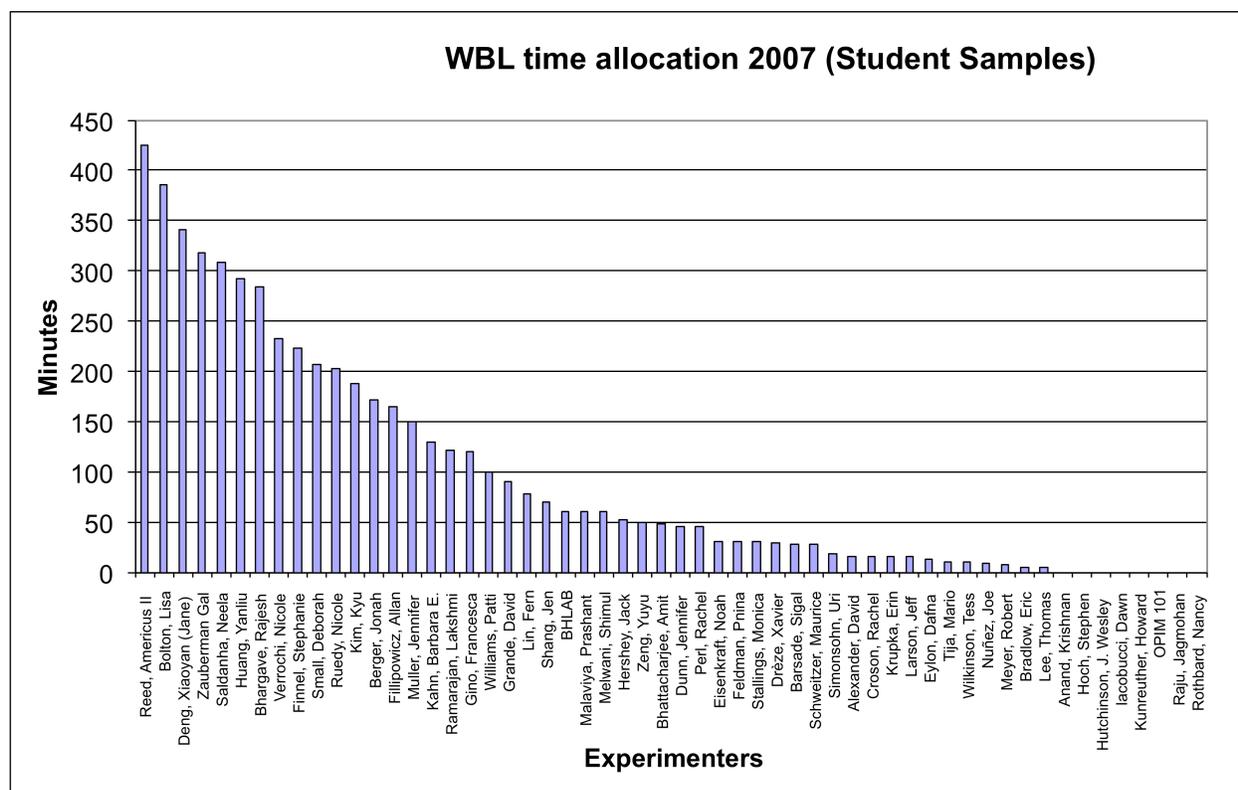


Exhibit 6

Lab Usage by Experimenter



Note: Faculty with zero minutes are advisors of graduate students involved in joint research.