Behavioral Research Meetings

Once a week, behavioral researchers at Smith gather together to talk shop. Faculty members from Marketing, M&O, and LBPP are regular attendees, in addition to several PhD students, Smith Behavioral Lab manager Kathleen Haines, the lab GAs and undergraduate interns. In fact, over the course of the 2012-2013 academic year, these lab meetings have expanded so much that the group was forced to find a larger meeting space (the group now meets on Mondays in VMH 2515).

During some of the meetings, faculty and students present their research in progress, hoping for feedback on their work and suggestions about future studies to run as they fine-tune their work for submission to top-tier journals. Other meetings are devoted to a discussion of recently published research. For example, Stephanie Eckerd of LBPP led a discussion of an article published in Psychological Science on detecting trustworthiness in economic exchanges. Discussion of the paper, including a study in which a robot communicated trustworthiness cues, was lively. Another meeting was devoted to a discussion of methods. PhD student Tom Kim led a presentation about using Bayesian methods for data analysis.

The group also discusses current events. For example, meetings last fall kicked off with a series of discussions about ethics in conducting lab research. The fields of social psychology and marketing have been rocked over the last couple of years by a series of scandals stemming from the fabrication of results in articles published in top-tier academic journals. This has led to a lot of introspection in these fields about ethical research practices. In keeping with this larger discussion, the lab group engaged in a detailed discussion of research practices and developed a code of conduct for ethical research.

Across these meetings, the diverse background of the group, including participants from different departments and those at career stages from undergraduate students to full professors, has led to excellent discussions covering a wide range of issues and perspectives. We hope to continue to foster this sense of community within the Smith School. Contact Rebecca Ratner, rratner@rhsmith.umd.edu, if you’d like to receive updates about the meetings.

Understanding the Appeal of Suboptimal Contracts

Anna Devlin, PhD Student, DOIT discusses research conducted in the Smith Behavioral Lab

Research on supply chain contracts has focused on the design and analysis of efficient contracts that outperform the traditional wholesale price only contract. Despite the potential of these more sophisticated contracts, we observe that in practice, most suppliers and retailers continue to use wholesale price contracts. Research by Anna Devlin, PhD student in DOIT, Wedad Elmaghraby, Associate Professor in DOIT and Rebecca Hamilton, Associate Professor Marketing, addresses why suppliers are so averse to adopting more efficient contracts in practice.

In a series of interviews with practitioners, the research team learned that most suppliers and retailers were aware of more efficient contracts that allowed suppliers to share risk with retailers. However, suppliers seemed reluctant to use these contracts because they felt they had no control over the retailer’s business practices. If they used a risk sharing contract, such as a buyback contract or a markdown money contract, would the retailer have less incentive to exert effort to sell the merchandise?

To better understand supplier preferences between wholesale price and efficient contracts, the researchers developed an analytical model of the supply chain with one retailer and one supplier in a newsvendor setting with two modifications: (1) demand is influenced by costly, unverifiable retailer effort and (2) the salvage value may be decreasing in the amount of remaining inventory.

The team received funding through a NSF ADVANCE grant, and they tested this model by recruiting over 300 undergraduate students using the Smith Behavioral Lab and the Smith eLab. They conducted a series of pre-tests and experiments examining supplier preferences for supply chain contracts. Their results show that suppliers prefer a more efficient risk sharing contract to a wholesale price contract only when the retailer is expected to exert high effort. When the retailer’s effort level is expected to be low or is uncertain, the wholesale price contract is preferred. However, the supplier’s strong preference for the wholesale price contract is significantly lessened when the retailer’s salvage value is variable and decreasing in the amount of leftover inventory. These effects hold even when individual differences in loss aversion, anticipated regret and numeracy are controlled for.
How Does the Smith Behavioral Lab Compare to Labs at Top Business Schools?

Since its launch in 2003, the Smith Behavioral Lab has strived for recognition as a premier behavioral research lab supporting the Smith School’s top 10 ranking in international business schools for research. MBA student and Smith Behavioral Lab GA Chris Dettmar recently conducted an informal survey of labs at other top business schools to see how Smith’s facilities compare. The results show that the Smith Lab holds its own across all relevant comparison categories (see table below).

The Smith Lab utilizes three facilities to carry out its mission. The Main Lab in 3518, where researchers conduct large-scale studies with up to 18 participants per session, the Eye Tracking Lab in 3518A, which allows researchers to record eye movements and measure visual attention while participants interact with different media, and the Team Process Lab in 3509, which uses wall-mounted cameras and microphones to provide discreet audio and video recording capabilities for group interaction studies.

Another reason for this trend is the growing influence of behavioral economics on related disciplines. Behavioral economists tend to be skeptical of experimental results unless participants make consequential choices. If a research participant states that she prefers one product to another in the lab, this statement is more likely to reflect her true preferences if there is a cost to making the wrong choice. For example, if she chooses a video game to play in the lab, she has an incentive to express her true preferences.

A third reason for this trend is that technological advances allow researchers to easily and inexpensively create experiences for participants. Researchers can use online survey tools like Qualtrics to give participants songs to listen to, movies to watch, and video games to play. A recent analysis of papers published in the Journal of Consumer Research shows that the proportion of papers including studies engaging participants in real experiences increased from 14% in March 2000 to 37% in March 2010. The studies run in our lab reflect this trend, making it likely that passersby will continue to see students inside the Smith Behavioral Lab eating snacks, listening to headphones and playing video games while learning about consumer research.

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Trends in Consumer Research

Walking by the Smith Behavioral Lab, you might look in the window and see students eating snacks, listening to headphones or playing video games on their computers. Are they goofing off, taking a study break? Quite the opposite: they are learning about research.

No longer is consumer research conducted by asking people to fill in long, detailed paper and pencil surveys. Increasingly, consumer researchers are trying to engage consumers in real experiences in the lab to help them to make better predictions about how consumers will behave outside the lab. For example, Associate Professor of Marketing Rebecca Hamilton and Professor Roland Rust show that when consumers evaluate products like DVD players before using them, they prefer products with many features over those with few features. After using the products, though, they prefer those with fewer features that are easier to use (Thompson, Hamilton and Rust 2005). Professor Rebecca Ratner’s research shows a similar error in prediction: before eating jelly beans, consumers predicted they would like a particular flavor more after eating a disliked flavor than after eating a well-liked flavor (a contrast effect). In practice, though, this effect was smaller than consumers predicted (Novemsky and Ratner 2003). Such errors in prediction are one reason researchers prefer to engage participants in real experiences.

By the Numbers

During the 2012 calendar year...

- 6,000+ Participant hours were spent in all lab sessions for Mktg and M&O courses.
- 100 Academic research studies were conducted in the behavioral lab.
- 59 Academic papers have been published based on research conducted in the lab.

www.rhsmith.umd.edu/behavioralab/journalsarticles.aspx