
THE Interface

NEWSLETTER OF THE
HUMAN FACTORS &
ERGONOMICS SOCIETY
SOUTH JERSEY
CHAPTER

JULY 2003

We're having a great summer!

Presentations, movies, baseball, and picnic



What to do with data in an applied environment? An opinion.

By Mike McAnulty

In an article in the Fall (2002) Newsletter of the Human Factors and Ergonomics Society Test and Evaluation Technical Group entitled *The Leap from Data to Conclusions*, Dr. David Meister argued that conclusions drawn by the researcher must go beyond the data produced in a study, something those of us with strict experimental psychology training may be reluctant to do. Meister says that "Data describe what was found; conclusions describe what the researcher thinks the data mean in the larger framework of technological life." In an academic environment, where we are conducting tightly controlled experiments about general principles with whatever participants we can find with a limited grant, perhaps we should be cautious. In an applied environment, I think it is generally appropriate for the researchers to take that extra leap, to do more than describe the

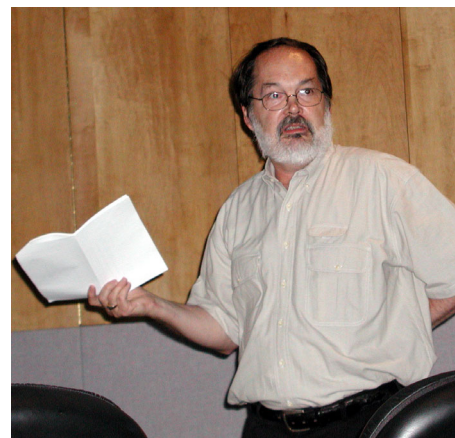
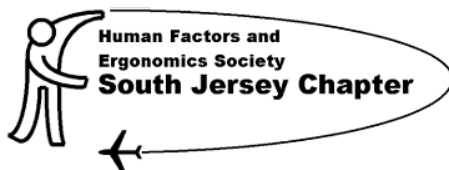
data in more qualitative ways but not really tell the reader (who frequently isn't a researcher and doesn't know how to interpret the data in either quantitative or qualitative forms) what we think the data means for a particular system or situation. I think the primary responsibility is for the researcher to address the important underlying issues for which the study was conducted. If we can't do that, then we haven't designed the study very well. As long as we don't go too far beyond the constraints of our study manipulations, it's OK to take that leap; it may even promote discussion of alternative conclusions, and that's usually a good thing.

(see **Data**, page 2)

Program Events

By Edmundo A. Sierra, Jr.

Our Chapter event held on June 25 proved to be quite interesting. Dr. Mike Atwood of Drexel University gave an outstanding presentation summarizing his current research. Using multi-dimensional scaling and factor analysis techniques, Dr. Atwood showed that designers really have some very different ideas and approaches regarding design.



Dr. Mike Atwood explains his research (photo by Kate McDevitt)

The speaker at our last Chapter event was Becky Ojserkis. Becky presented the findings of her project, "The Effect of Age on Learning ASL" to a room full of South Jersey HFES Chapter members.

Becky was the 7th grade winner of the Junior Division of the Behavioral Health and Social Sciences (BSS) category at the Jersey Shore Science fair. There were more than 32 entries in the competition held in March at Stockton College. The South Jersey Chapter provided prizes for the BSS category and invited the winners to present their projects to the Chapter.

In her study, three groups composed of 2nd-graders, high-schoolers, and older adults (70+ years) were taught to sign fifteen colors.

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Data

(Continued from page 1)

As an example, we have conducted several studies in the Human Factors Group assessing the impact of aspects of a new digital air traffic communications system. Each simulation produced dozens of dependent variable measures, which were presented in the results. We also summarized the data at a more general level. But the main conclusion was that the system would work as currently designed, and was likely to be better than the current system. Several members of the intended audience have questioned whether the simulation was sufficiently realistic or whether the data were strong enough to support the conclusion, but at least no one has asked what do we think the data really mean or left the briefing asking themselves what do I do with these numbers now!

At the same time, I think it's important to recognize that some applied human factors studies simply produce data for the customer to take into consideration. That is, we can only report the facts, not draw conclusions from them. For example, the decisions about whether to change aspects of system design identified as problematic during a usability assessment need to consider at least the frequency, likelihood, and consequences of the problem; technological feasibility of the changes; the cost and schedule impacts of the changes; interactions with legacy systems; the implications for training on and maintaining the system, and the ever present politics. The human factors researcher provides data for that decision, and depending on the nature of the data may be able to express professional opinions on it, but we can't decide which changes must be made.

Am I backpedaling on my original support for Meister's position? Not really; it's a position I favor strongly, but I recognize there are exceptions and no clear rules for when you do and when you don't. As Meister says (and I'm stretching his meaning), "All this requires re-

searcher judgment." If any Chapter members have other thoughts on this issue, please contact me to talk or, perhaps, write your opinion for the *Interface*.

Events

(Continued from page 1)

Participants were also taught strategies for remembering the signs. Becky then tested participants for the number of colors that they could remember to sign after a week. The results indicated that participants in the high-school age group remembered more than both the 2nd-graders and the older adults. Of the three groups, older-adults remembered the least number of signs. "The older adults also took longer to teach," Becky added.



Chapter President, Mike McAnulty, introduces Becky Ojserkis (photo by Kate McDevitt)

Becky gave a well organized presentation that induced many questions. She also fielded chapter members' questions with skill.

After the talk, Chapter members enjoyed *Triumph of the Nerds*, a video about the GUI evolution. The video described the beginnings of the personal computer, the rise and fall of Apple computers, and the rise of Microsoft Corporation. The video also provided some insight into the future of personal computing.

Our next meeting will be on August 19th. Jerry Hadley will speak to us about his support of the post 9/11 mission of the Federal Air Marshal program. We will also tour the new Human Factors

Lab constructed for research in security issues. The Chapter is also planning a social outing to a Surf's Baseball game on August 22. The details will be sent to all members soon.

Upcoming events:

AUGUST – FAMS by Jerry Hadley, Tour: New FAA Labs, Surf's Baseball

SEPTEMBER – Chapter Picnic

OCTOBER - Brownbag Movie: Topics in Human Factors

DECEMBER - Panel Discussion: Statistics in Applied Research

Chapter Member to Present on Technology Transfer

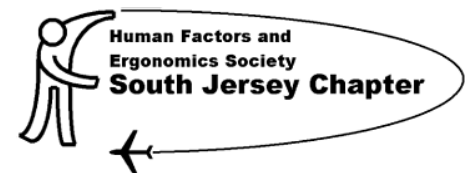
By Mike McAnulty

Deborah Germak will give the first of a two-part presentation at the Speaker's Series on Wednesday, August 20, 2003, at 10:00 a.m. in the Auditorium. Part I is on Technology Transfer, and what it can do for you. Part II will be a presentation on September 3, 2003, by the company ESCO who designed and developed the soft ground arresting system under the Technology Transfer program. Chapter members are cordially invited to attend both presentations.

Treasurer's Report

By Jerry Hadley

As of the last Executive Council meeting on July 8, 2003, there was \$374.13 in checking and \$767.28 in savings.



Highlights of Recent Executive Council Meetings

By Gulshan Panjwani

June 10: Mike McAnulty, Tanya Yuditsky, Jerry Hadley, Todd Truitt, Edmundo Sierra, Jr. & Gulshan Panjwani were present.

The first item of business was the June 25th talk by Dr. Atwood. The Executive Council (EC) decided to give him a \$50 gift card from Borders. Jerry will purchase the card. Mike will be introducing the speaker. Tanya will arrange the pizza and salad to be served prior to the talk at a cost of \$3 for members, \$5 for non-members.

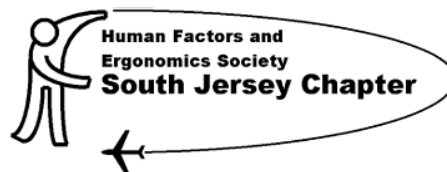
The next issue on hand was choosing a fun-filled summer event. Based on the vote that was taken in the last two weeks, it was decided to have both a Surf game and a picnic. The vote to choose the day of the week for the event was equally in favor of Friday and Saturday. Hence, the EC decided to schedule the Surf game on a Friday in August that has fireworks and the picnic on a Saturday in September. The picnic will be held at Estelle Manor park.

The EC scheduled the next chapter event for July 15. The winner of the science fair award who had a project in Behavioral Sciences has consented to come and present her project on that day. She will receive a tour of the human factors lab and the Technical Center. After the tour, she will present her project. The EC determined that the chapter would hold the event during lunchtime. In addition to the presentation, we will show a movie on User-Centered Design.

The next topic discussed was the dates for Jerry Hadley's presentation that was cancelled in May. The EC tentatively scheduled the talk for August 19. After the short presentation, Michael Snyder will provide a tour of the new security research human factors lab.

The EC scheduled the next issue of the Interface for July 14.

The Treasurer provided account balances of \$424.13 in checking and \$767.28 in savings.



July 8: Mike McAnulty, Jerry Hadley, Todd Truitt, Edmundo Sierra, Jr. & Pam Della Rocco were present.

The Membership Chair reported that we have 28 paid members for this year. We acquired two new members at the previous chapter event.

The Program Chair and President confirmed that the next event would be held on July 15. It will be a brown bag lunch with a presentation by one of the Jersey Shore Science Fair winners followed by a movie. The next event, a presentation by Jerry Hadley and tour of the new security human factors lab, was scheduled for August 19. We also planned to attend a Surf's baseball game on August 22 for the next social event.

The Executive Council (EC) decided to delay the next issue of the Interface until after the July 15 event so that we could include more material. Events prior to publication of the Interface will be announced via posters as has been done in the past.

The President recommended that the EC begin working on the election process for next year. The effort will be led by the Elections Chair starting at the next EC meeting to be held on August 12.

South Jersey HFES Chapter Membership and Renewal Application

For the Year 2003

Applicant Name: _____

New Member *(complete all fields)*

Renewal *(complete this section only)*

I am (a Fellow / a Full Member / an Associate Member / Not a Member) of the National HFES (circle one)

Organization/Company: _____

Mailing address: _____

Daytime phone: () - _____

Evening phone: () - _____

Fax number: () - _____

E-mail address: _____

Endorsing SJC-HFES Member: _____

SJC HFES dues for 2003 are \$10. Make checks payable to the "Human Factors Society." Submit applications and checks to:

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ACB-220, RDHFL Bldg 28
Wm. J. Hughes Technical Center
Atlantic City Int'l Airport, NJ 08405