

Federal Reserve Forum on Consumer Research & Testing: Tools for Evidence-based  
Policymaking in Financial Services, November 9, 2010  
Panel One: Exploring the root disciplines for studying consumer behavior

John Payne:

Well, thank you for the opportunity to be here, um, I've got the unenviable task that Jeanne gave me of trying to sort of give you a sense of what psychology might be able to bring to both the understanding and improving of consumer financial decision making in 15 minutes or less so.

One of the themes I'm going to talk about today is that the scarce resource, the scarce resource for decision making is attention and in that spirit let me give you the three things I hope you remember from this talk. Number one, process matters. We need to be concerned not only with what decisions people make but how they go about making those decisions. And I will argue that the process matters both in terms of our ability to predict what consumers will do but also equally important to design effective interventions to change what they do. So point number one, process matters. We will talk about that and we'll talk about some tools that really will help us better understand process.

Second point, the task matters. That is the term that you see a lot now in Washington, D.C. and other places the decision architecture, the choice architecture, how you structure the task matters a lot. For example choosing among two alternatives, choosing among six alternatives, choosing among 20 alternatives or more, is not the same thing. Okay, it changes how people make those decisions, it changes whether they'll even make a decision in the first place and it changes what decision they will make. All right so you have to be very sensitive to the task.

I'll also give you an example of where a simple changing in the wording of a question will matter and in fact let me run a little experiment. Everybody from this side of the room over here shut your ears, you're not here. This side I want each of you to write down what you think the probability is that you will reach the age of 85 or older. You will live to be 85 or older. Now you can shut your ears. This group over here, I want you to write down what you think the probability is if you think you will die by the age of 85 or younger. So you're all "die by", you're all "live to". And we'll talk a little bit about how simple little changes like that can have serious impacts on the kinds of judgments the people will observe and so forth.

The last thing, third point, individual differences matter. Now a lot of people here, economists and others certainly recognize that, they'll talk about individual differences, and things like risk attitudes, time preferences. I'm going to argue both enriching those concepts what we really mean by risk attitude and time preferences, but I'm also going to talk about individual differences in thinking styles, individual differences in emotional states. One of the issues that was raised was emotional interactions well it turns out emotions do matter and different types of emotions matter. Fear is not the same thing as anger, neither one is the same thing as sadness and neither one is the same thing as happiness. So you got to be not only worried about the role of emotions

but thinking about the type of emotion. Were you fearful after the financial collapse or were you angry? What you do depends on that emotion.

And last and not least, you have to worry about individual differences in terms of cognitive capacities or capabilities, and again I will argue not only in terms of knowledge but in terms of process.

Okay this works here, um, this slide I won't go over but let me just say that one of the things I will stress is all those points I made about process, task and individual differences matter in particular in the area of consumer financial decisions, particularly big ones like mortgages, a lot of loans, retirement planning and so on because they're characterized by situations and consumers who are not going to have the ability to sort of learn you know what works. A lot of these decisions are faced a few times by consumers, they extend over a long period of time, they involve difficult trade-offs, some of which are emotional so I've been recently working in the area of something we seemed to have relatively ignored in this country when we went to defined contribution plans which is what the hell happens after you retire with the money you've accumulated. It's sometimes called the "decumulation phase", okay do you buy a life annuity as a way to sort of managing the longevity risk but then you got to sort of trade off, how much for me, how much for my kids, the price values, I mean that's not only a cognitively difficult that's an emotionally difficult decision, multiple risks and so on.

Okay, first point I've already made a few psychological prospective, process matters, uh, the man I was fortunate enough to work with, Herb Simon, has a famous quote where he sort of says "the theory of human rationality must be concerned with the procedural rationality how decisions are made as well as what decisions". I'm going to argue for not only this idea of attention as a scarce resource but another idea that psychologist generally are now accepting which is in most decisions that we are going to be concerned with and I would argue particularly most financial decisions, it isn't so much that people have very well established, coherent, stable values that they bring to the decision they have to make, the financial decision, but often in the course of making that decision they construct their values in part based on what they do bring like more money's better than less but also how the problems is structured for them, how simplified it is, how complex all of those sorts of very important issues. I will also argue that contrary to much of what has been traditional views of rational decision making, human decision making is fundamentally path dependent. That it is depends on the order in which you do things, going A to B is not the same thing as going B to A. And we can sort of understand how those paths matter, here I'll give you some discussion of that in detail but it turns out it really matters. There's a colleague of mine, former student who is now at Columbia, Jonathan Levav whose done some work on car purchases where you go through a site and you systematically say you know what kind of interior do you want, what kind of transmission, what kind of engine, a whole bunch of things, turns out, and by turns out significantly, thousands of dollars difference depending on the order in which you make those sub decisions and there's a good reason for that.

I'll talk about some alternative methods, now a little bit of this we talked later on but I'll give you an example, if you really believe that attention is a scarce resource for example what is the Fed doing and others doing to measure attention. You know to what extent are you using new tools like eye tracking to sort of measure attention? I've already mentioned individual differences and towards the end depending on time I'm going to try not only to talk about changing the choice architecture of the task but arguing that in addition to disclosure we need to be thinking about what can we do to provide thinking tools to the consumer. Tools that might help them overcome some of the cognitive limitations but let me also suggest helping them better reason emotionally. I mean there are a few people in here maybe my age but let me give you a real quick example on retirement again. Most things you see about retirement talk about what it means to be a young, healthy 68-year-old or 70-year-old, all right. You retire, you're off with your significant other, you're on a boat in the Caribbean. Okay you got to retire to have that. I don't know if any of you have this but I recently lost my mother, she was in her late 80's she was living...we had to put her in a place to...she was not quite as sharp as she had been, very sharp woman but not quite any more, healthy, that's a whole different concept than the image of what retirement's like. How many people in here could even begin to think about that emotionally? What that means...a few people, but it's hard to do. All right so I'll think about thinking tools as well as disclosure as part of this sort of thing.

Okay I won't go over this, I've already mentioned the constructive view but I will stress that I think this view, the roll of process and task, will become more and more the way you want to think about these problems as the environments in which consumers operate, become newer, change more often, more novel because that's going to lead to more construction not less as you get those rapidly changing environments.

All right I talked about attention as a scarce resource, I'm going to make a point here, very simple one, that attention both reflects our preferences and shapes our preferences. You need to be aware that both of that happens. And I will argue for people in this room and policy makers, managing attention is both a problem for you in terms of trying to influence what people will do but it is also an opportunity and we'll talk about that.

Okay let me talk a little bit about the drivers of attention, I apologize this is another experiment it's called a cognitive fluency which is can you even read some of this stuff. Disclosures have that problem all the time, right, uh, small print. The idea attention is a scarce resource, and because of that people are very selective in what they pay attention to, would not be a problem or wouldn't be as big a problem if what drove your attention were your values. The only thing you really...what you pay attention to was first was what was most important, what you pay attention to second was the second most important thing. If that was all that matters yeah being selective would be a bit of a suboptimal behavior but not huge. Unfortunately that's not the whole story.

Attention is also driven by what can be thought of as both cognitive and I will argue affective ease. Key idea here of affective ease is if I look at a number and I can't immediately tell you

whether that number is a good thing or a bad thing, I'm probably not going to pay any attention to it. An example, I've worked in the area of mutual fund fees disclosure I was reading this story and they were talking about 80 basis points. I suspect many of you know what that means and you may be able to say that's a good fee. Many of you say most of the people, even in Washington, D.C. would have no idea whether 80 basis points for a mutual fund fee was good, bad or what. What are they going to do if they can't do that? They're going to ignore it.

Displays matter, simple sorts of things. There's some work recently that is shown simply you know where does the most important information go for most of the people in this room it would be the upper left hand corner. Well if I want to make sure it's not paid as much attention to where would I put it? Now this seems simple but it really does matter, do I say things in words, in graphs in numbers? Problem requirements, very quickly you know what you ask them to do will determine what they pay attention to and this can also have a big sort of thing, you'll have issues like what is the focus of anchor points. Disclosure, put in a minimum disclosure or payments on a credit card, would that cause people to pay more each month or less on their credit card? Sequence I've already talked about, individual differences...and so forth.

All right this I actually got off a recent site that talked about some of you are probably much more familiar with this than I am about the sort of new labels for automobiles, but it talks about various kinds of information there are a lot of good properties here so one of them rules about affective ease is to put in points so people will know whether the value is good or not. A colleague of mine a couple colleagues at Duke have really argued that we need to go for sort of how many, not gallons per mile, but sort of how far it takes in terms of gallons to go because it's more linear and things like that.

In the spirit of time, I'm going to jump ahead a little bit about procedures but let me give you very quick examples of three studies that sort of illustrate the points. The first one here, this is an annuity choice and I want to illustrate how you could actually track eye movements here. Each of those is a fixation a gaze, the size of the circle is the relative amount of time the people are looking at it. Starts to see where the relative of focus is and by the way if it's a 100 thousand dollar annuity, it's about 85 when you break even. And I didn't sort of show this but you can also track the pattern of what you look at, first, second, third, fourth and so on. So if it's not a part of your tool kit let me suggest that if attention matters ask yourself what are we doing to sort of measure attention in this way.

Very quickly this is the life expectation question, I recently did this with over 2000 people on the internet, it's sort of a variation of a question that's been part of the health and retirement survey for about 15 years now and one final...one thing I wanted to point out here, uh, this dash blue line is the actual numbers, green is the people over here who did the live to, uh, people over here the die by. Interesting that simple wording change, if you look at sort of where people think the 50/50 point is notice that for the die by it's at 75, live to it's ten years later. So think about a life cycle consumption model what the difference is on whether you think you're going to die at 85 or

95 or 75, really matters. I don't have time to do the sort of underwater mortgages, it turns out that one of the things that really seems to be associated with both being under water and what you do when you are under water in terms of walking away, how much you are focused on the present versus the future, turns out to be very predictive.

And last my slide, summary slide here again what I've already said, process matters, recognize the disclosure is only the starting point. You got to understand how people are going to use the information, the processes and talk about various kinds of interventions but again recognizing also the important role that...and let me be a little more on the soap box here, how you respond to an intervention shouldn't be the standard. It's the 99.5 percent of the rest of the people and the variation and heterogeneity in those people that really should matter, thank you.