Women's High-Consequence Decision Making: A Nonstatic and Complex Choice Process

Cäzilia Loibl, Jonghee Lee, Jonathan Fox, and Erin Mentel-Gaeta

The choice processes women investors employ when making mutual fund decisions in employer-based retirement plans were examined. A qualitative analysis of focus group material was used to investigate women's decision making environments and strategies employed for this high-consequence decision. Interpretation of extracts from the focus groups suggests that the observed lack of investment information, reliance on simplified decision heuristics, and dependence on decision making guidance from others characterize largely constructive choice processes. The results emphasize the nonstatic and complex nature of women's investment decision making.

Key Words: consumer psychology, decision making, portfolio choice, women investors

Introduction

Investment decisions made today often are critical for financial security in later life. Due to the potential for large financial loss and the high costs of revising or recovering from a wrongful investment decision, choosing mutual funds for one's retirement savings qualify as "high-consequence decisions" (Kahn & Baron, 1995; Kunreuther et al., 2002). As Kunreuther et al. (2002, p. 260) pointed out, "The decisions that matter most in life are often those that we are least prepared to make." Bernheim (1994) cited three possible justifications for this statement in the context of investment decisions. First, the average American has little opportunity to practice appropriate rates of saving and investment strategies through trial and error when saving for retirement. Second, the rapid changes in the economic environment provide individuals with little guidance from the experiences of others, in particular older generations. Third, professional advice might be inadequate for two reasons: Naive individuals may not recognize or acknowledge the need for assistance until it is too late, and they may not be equipped to evaluate the quality of information and advice provided by experts. In short, what makes investment decisions challenging is not only the presence of the possible consequences of error, but the awareness of the inexperience with which the average person is going to approach them (Kunreuther et al., 2002).

A special research focus in the consumer choice literature addresses the nature and strategies of high-consequence decisions (cf. Kahn, 2005; Kahn & Baron, 1995; Kahn & Luce, 1995) but notes the lack of empirical evidence for the concepts (Kunreuther et al., 2002). From an empirical point of view, investment decision making presents a particularly rich opportunity to study high-consequence decision making. First, investment decision making seems to match the concepts developed in the consumer choice literature, including the abundance of available investment information (Agnew & Szykman, 2005; Iyengar & Lepper, 2000), limited time for processing the available information in a retirement plan decision (Madrian & Shea, 2001), missing information (Merrill Lynch Investment Managers, 2005; NASD Investor Education Foundation, 2003; Oppenheimer Funds Distributor, 2004), complexity and conflict among mutual fund attributes (De Bont & Schoor-

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mans, 1995), and less organized or more complex information display formats (Fiske, Luebbehusen, Miyazaki, & Urbany, 1994).

Second, despite the importance of retirement savings decisions, only rarely has investment decision making been studied for the purpose of understanding consumer choice processes. Biggs, Bedard, Gaber, and Linsmeier (1985) found in an empirical study that financial professionals increasingly used noncompensatory decision strategies when faced with tasks of increasing complexity. Compared to compensatory decision strategies, which are considered rational because they are built on collecting and comparing all the necessary data, noncompensatory decision making essentially shortcuts the compensatory process to make the decision making process easier. This happens when people do not collect all the relevant information systematically, fail to consider the relative importance of various attributes, or do not trade off the benefits of some attributes against the deficits of others. Kahn and Baron (1995) indicated with experimental research that individuals facing a significant investment decision were more likely to believe that the high consequence decision required compensatory strategies and were more likely to advocate the use of compensatory strategies when an investment professional was making the decision for them.

Although a number of studies have confirmed the link between the provision of choice and increase in intrinsic motivation, perceived control, task performance, and life satisfaction (cf. Iyengar & Lepper, 2000), the current paper was motivated by previous research indicating that real-world situations often provide more complex situations than experimental research can assess (Iyengar & Lepper, 2000). Women investors' choice processes present an opportunity to study this complexity for two reasons. First, the need to choose well in high-consequence investment decisions is particularly important for women. Research in the personal finance literature has documented women's often shorter and interrupted employment history, restricted career advancement, and longer life expectancy. Second, women investors exhibit, in general, lower investment confidence and a rather conservative record of investment behaviors (Bajtelsmit & Bernasek, 1996; Barber & Odean, 2001; Bernasek & Shwiff, 2001; Embrey & Fox, 1997; Jianakoplos & Bernasek, 1998; Powell & Ansic, 1997; Prince, 1993). This unique set of characteristics presents a significant financial challenge to women investors and underscores the need for a comprehensive understanding of their high-consequence financial decision making processes.

The main contribution of the present study is that it employs the choice goals framework (Bettman et al., 1998) to examine women investors' retirement plan decision making. This framework posits that consumer decision making tasks represent either one of two situations: situations where accuracy and effort goals predominate, and situations where minimizing negative emotion is relevant. In accuracy-effort situations, decision makers select decision strategies based on some compromise between the desire to make an accurate decision and the desire to minimize cognitive effort involved in reaching that decision. An example of such decision tasks in financial decision making includes trading off the reading of a mutual fund prospectus (effort) with the likelihood that it provides useful information for one's decision making (accuracy). Another example is trading off the decision to invest in an index fund with low fees but lower earnings perspectives (effort) against the task of identifying an actively managed fund with a reliable fund manager and expectations for higher returns (accuracy). There is little emotional involvement in these kind of consumer choices. They are purely based on cost-benefit calculations weighing the effort of collecting and considering all alternatives against the accuracy required to achieve a suitable outcome.

On the other hand, consumers sometimes face emotion-laden choices. Such situations occur when several important goals conflict with each other. According to Bettman et al. (1998), such cases require trade-offs that the decision maker does not want to make because trade-offs may involve giving up the attainment of a goal on which the individual does not want to accept anything less than planned. Examples of such emotion-laden consumer choices in financial decision making include trading off the safety of certificates of deposit against rate of return concerns or trading off the investment risk due to one's own financial ignorance versus the investment risk from trusting a financial advisor to make the decisions. Such choices can, according to Bettman et al., lead to negative emotion, and the individual decision maker is likely to look for a way out to escape the wrenching situation as fast as possible.

To examine the validity of the choice goals framework for women's financial decision making, the present study relied on a qualitative approach using focus groups to explore the choice processes. Affirming Lewis (2001),

it was decided that focus groups were an appropriate and innovative method for exploring motivations, attitudes, and perceptions as they provided an opportunity for women investors to express their views in their own words and in a social context with fellow women investors. The present study used this approach to suggest an understanding of consumer choice processes in a situation characterized by lack of information, complex information display formats, and time limits for processing the available information. The findings of this study were intended to describe the nonstatic and complex nature of women investors' mutual fund choice processes. They should be considered suggestive rather than definitive in nature.

Methods

Informants

A total of 45 women participated in five focus group sessions. Most women were between the ages of 40 and 64 ($n = 40$, 89%), about three quarters (76%) had some college education ($n = 13$, 29%) or a college degree ($n = 21$, 47%), and about half were married ($n = 23$, 51%). Nearly equal numbers of participants had been contributing to their retirement plans for 10 years ($n = 13$, 29%), 20 years ($n = 13$, 29%), or longer ($n = 15$, 33%). Many informants ($n = 28$, 62%) had access to investor education at the workplace, and the majority ($n = 27$, 60%) ranked their knowledge of mutual funds as "low to intermediate" (5 or below on a 10-point scale of *not very knowledgeable* = 1 to *very knowledgeable* = 10).

Survey Environment

The participants in the focus groups were attendees of the "2005 Ohio Women & Money" conference (cf. Gaeta, 2005). This day-long seminar was sponsored by the Ohio Treasurer of State and has been offered for the past 6 years during the summer months in the 12 largest cities of Ohio. Conference participation was open and free of charge to every woman in Ohio. The seminars offered a series of six 1-hour presentations on budgeting, saving, investing, and retirement and estate planning (Ohio Treasurer of State, 2005).

The focus group participants were recruited through announcements during the morning introduction at the conference and again before the lunchtime keynote presentation. Individuals who actively invest in mutual funds were invited to be part of the focus groups. The focus group was presented as an opportunity to exchange personal experiences about mutual fund investing. The interviewer verified personally that the potential participants who expressed interest had experience with investing in mutual funds. If this was affirmed, the individual was given the time and location of the focus group meeting. Each focus group meeting lasted 1 hour.

The five focus groups were conducted by a female interviewer with experience in both financial service and qualitative research. One focus group was conducted in Youngstown, Ohio, on June 3, 2005 ($n = 22$). Two focus groups were completed in Cincinnati, Ohio, on June 17, 2005 ($n = 5$, $n = 3$), and Columbus, Ohio, on June 24, 2005 ($n = 10$, $n = 5$).

Procedure

Each focus group session followed the same procedure. Participants were informed of the purpose of the focus group, notified of confidentiality, and asked for their permission to record the session. They completed demographic questionnaires and briefly shared how long they had been investing in mutual funds or had been participating in a retirement plan. The individuals were asked to name and explain the characteristics of the sources of information they had used when deciding to purchase mutual funds. Further, the interviewer inquired about the selection criteria for the mutual funds purchased and about the information considered most important in the selections. In the second half of the focus group discussion, participants were asked about their familiarity with each mutual fund prospectus and how it was used in the mutual fund selection process. The session concluded with questions about the participants' preferred information source in making mutual fund decisions for their retirement fund.

Results

The approach for this analysis was to present representative excerpts from the focus groups. This approach was not an attempt to make claims about the representativeness of the informants. Rather, the data were regarded as interpretative resources to map different ways in which women are making mutual fund choices. The current study presents selected informative textual units for interpretation to explore the meanings produced when women talked about their mutual fund decision making. The work was meant to be both suggestive for future research and interpretive of the complex mutual fund decision making process. In the following paragraphs, we have presented a thematic analysis and have provided supporting quotes for the analysis. We have shown how the decision making strategies women use are more or less accurate, effortful, and emotionally wrenching in their social and informational envi-

ronment, thus following the framework describing complex decisions outlined in Bettman et al. (1998).

Lacking Investment Information

The participants suggested that a central feature of high-consequence investment decisions is that investment decisions are made with little confidence in investment knowledge. The participants noted they lacked information necessary to generate preferences about mutual fund options and fund attributes. They missed having a set of preferences on hand that they could rely on to make the investment decisions. They were faced with difficult choices with multiple options and no obvious right answer. The process of constructing investment preferences caused concern and unease. The following statements illustrated the participants' lack of confidence in their investment knowledge[1]:

> *As far as investing, primarily the information that I get is through my job. Am I that knowledgeable about it? No. I basically put my money in a retirement plan at work that does invest in stocks. Based on what they told me, I am in the high-risk group because I plan on being there long term. As I get closer to retirement, I will then look at it and start doing some more conservative investments.*
>
> *I don't know what the plan is, but that is what we decided. I consider myself as not knowing much at all. We have an advisor. We talk every year or two, and they advise me. So I kind of think I am dumb, but I try to learn more about it.*
>
> *I usually look at the past year and the 5 year and 10 year but usually the more recent, like the past few months. I look all the way across and try to guess. It is really a guessing game.*
>
> *I don't look at the news. I don't look what is going on. What comes in the mail comes in thick books, and I have gotten on the Web site, but it is very frustrating.*
>
> *They go over the quarterly statements with us. So it shows what we have made or lost in the fund and how it is doing. All I want to see is what is my money doing. We have been with this advisor 4 years, and I told them not to assume I know anything about investments and they talk to me in layman's terms, and I can follow what they are presenting to me. I am making money, I haven't lost anything yet.*

Simplifying Decision Making Processes

The participants suggested that their mutual fund choices involved a rather cursory consideration of limited information (e.g., the key information provided by popular financial Web sites). Most often, the women used specific attribute information to employ a lexicographic decision making strategy: the fund with the best value on the most important attribute was selected. For instance, many of the women believed that past performance was the most important attribute for a mutual fund, so they examined past performance (and no other information) for all funds and chose the one with the highest return over a certain period of time. The following comments demonstrated this decision making process:

> *If the trend is that it has been losing money for the last 5 years then it is generally one that I am going to stay away from. But I like to see that they have been pretty static; I don't like them to fluctuate a lot. That is basically what I am looking for, but if I am looking at something that doesn't have a lot of data then I have to make a decision about whether I want to just jump right in. But I like to look at things that have at least some established history, and I like the history to be even keel.*
>
> *I usually ask for the prospectus, and I'll read that for mutual funds. I like to see what the funds have done over a 10-year period from when they started.*
>
> *I look at things on our Web site, probably not as often as I should, and look to see what the trends are. I've got it all spread out, and then I shift money based on what I see happening at any given time. I am not always right on that, but you do the best you can.*
>
> *I looked at the fund sheets that they send you, and I kept looking at where things were invested and I moved to the middle range. I don't think I picked anything very aggressive. I chose on what I could see had been the past 5 or 10 years.*
>
> *I have meant to look at, but I have not looked at, what they have invested in because I don't want them taking my money and then turning around*

and investing in something that I don't like or that I would not approve of. Like an investment in a lot of aggressive eco-unfriendly companies. Years ago I didn't want them investing in South African apartheid; nowadays I deal with that, and now I have to figure out if I don't want them investing overseas.

Focus group discussions also showed that the participants paid attention to investment information found on personal finance Web sites. Compared to the printed materials, the Web sites provided the key information in an appealing form to the participants. The focus on key information and the less complex information provided a way for the participants to handle the information load to their satisfaction. The Web sites supported selectivity and presented a low-barrier decision making aide, thus matching the participants' capacity for processing information. The participants' preference for viewing investment information on financial Web sites was illustrated in the following comments:

> *With me, I have no patience. I like to get in, find out what I am looking for and that is why [name of Web site] and some company sites are very user friendly.*
>
> *The Internet is such a wonderful place to get the information. I mean reading a prospectus is just a mess. All the key information you would like to have is pretty much buried.*
>
> *I use the Internet because I can put in a code and compare three or so at a time. Instead of getting that little book and having to look here and here and here, I can just see them all at once, and I can see it on a chart or graph.*
>
> *I like the way it is presented. One time I got about 11 of them on there, and I could pull the charts all up at once. I knew where to look for each thing I wanted to see, and I could get more detail if I needed to on each one.*
>
> *I would like to see all the fund information in one place. If am looking at the fund, I want to see all the basic information with that fund right next to it. I don't want to see the risk in one area and the fees in another area. I am not looking to look at all the funds. I want it all right next to each other. I don't want to read all the footnotes. They do give us a prospectus which I don't read because it is more confusing than looking at the one sheet on [name of Web site].*

Relying on Others

Although the focus group participants might have relied on a simplified, lexicographic investment decision strategy, they looked for advisors among friends and coworkers whom they perceived used more extensive decision making strategies. The selected decision making aides seemed to consider mutual fund attributes in a less selective, more alternative-based and compensatory manner. Further, when using advisors, women seemed to combine strategies. For instance, they might separate the process into two phases: a first phase in which some alternatives were eliminated with the help of a friend or coworker and a second phase in which the remaining options were analyzed by the participants themselves using simplified heuristics. The following comments demonstrated the participants' experience in using friends or coworkers as advisors:

> *What I did to make that decision was ask two people in the office who I trust, and I know that they are very detailed and research oriented and I don't have the time. So I asked them where they put their money, and I put mine there.*
>
> *But I don't select a mutual fund based on the prospectus. It comes to your attention through some other means, such as research from a friend or someone who has done some research.*
>
> *I actually talk to a friend at work. He tells me that I should know what is going on, but he tells me the long-term picks, and he has been successful. So I figure he knows what he is doing.*
>
> *Basically, I asked some other people who were in my plan what they thought, and I have a friend who is very heavily into stocks. He did his stuff on his own. He was very aggressive, and he explained some of the options that I had and things to look at. At the time, he really told me to go more into the guaranteed with just a little in the more diversified because of the little money that I could contribute then.*
>
> *And I talk to my two financial advisors at [name of investment company] and [name of investment company]. I don't always agree with them;*

sometimes I play games with them because if I have a fund that I want, and he has fund that he wants I might take equal money in both of them and see who wins the horse race.

When faced with complex, high-consequence investment decisions and little experience dealing with them, the participants also looked for the professional guidance of a financial advisor. The advantage of employing a rational agent had to be balanced against the possibility that the financial advisor might not respect the participants' values or may provide misleading information. The following comments showed that the relationship with a financial advisor can be successful but also can present distressing situations:

When I got divorced, my financial advisor said that the first thing men do when they get divorced is start looking for other relationships and the first thing women do is learn about investing. She put me on the course. I have an IRA, a Roth, and deferred comp. I am trying to get my ducks in a row.

My advisor tells me not to look at the stock market every day. We talk quarterly, and I rode out the problems in 1987. She said not to do anything and stay still and that it would pass. So she has ridden this out with me for 20 years. She takes me to seminars and sends me to other ones and is really great.

We meet with a different person every couple of years, which I find distressing. It would make me feel a lot better if I was seeing the same person every time I went in there. I would have more confidence in someone I have been seeing for the past 10 years, but it is like he is moved up the board and I am down here.

I have mutual funds that were selected through an investment advisor. Quite honestly, I am on my third investment advisor. I have been very unhappy. They want me to transfer my money to them, and it's just sitting there. They have asked how I want to make my money grow, if I want to be conservative, what do you plan on doing. The last one made choices for me, but I lost a lot, and this one isn't doing anything.

I received a lot of information from my employer. They would have investment people come in and talk to us about the choices in the plans, but I didn't like the attitude of the presenters. They were really condescending, and I felt like they were selling me. I made some choices just based on what they gave us. Then when I left I rolled the money over to a CD because I didn't know what else to do with it. Then, I put it in mutual funds.

Avoiding Investment Decisions

The participants seemed to link the negative, stress-related emotion of making investment decisions to subsequent avoidance of the topic once the decision is made. The following comments underscored the fact that these decisions are uncomfortable and might call attention to losses:

I get a statement, but do I look at it? No. I just think my money is going in and don't pay attention to it. I don't even look to see what is going on with it.

A big chunk is in guaranteed and some in other mutual funds, but I haven't taken a look at that in a few years because it was just out of my mind. I figure I will work another 10 years after retirement. Plus I am really a novice when it comes to any kind of financial stuff at all.

I didn't do any major research. I just started it and let it go because with everything else going on, I was lucky to just remember that I had to have money taken out to set aside.

Revising Investment Decisions

The opposite behavior to avoidance involved direct efforts to solve the problem at hand. Creating a more successful portfolio by ongoing trading was reportedly a popular strategy employed by some women in the focus groups to help maximize the accuracy of their mutual fund choices, as evidenced in the following comments:

I occasionally scan the business pages in the paper, and I might remember what they were saying, like if this company invested heavily in tobacco stocks or in Chinese mineral rights. So, I might look at something I chose and remember to change it next time. Sometimes I look at those things and say, "Gosh, I should have bought

stock!" and other times I think I am glad I didn't touch it.

I recently made a shift into a fund because online it looked like it was doing well. This is probably not the way to do it but … and then I shifted some money into it and in the past 3 months it has not been doing well at all. I lost on that one so I moved a portion of it, the new money I was putting in, into something else because it wasn't smart to keep doing that.

I go to [name of Web site]. My daughter sent me to that site, so I use it a lot and compare between the same funds so I don't have to be charged. I like to transfer from one to another if one isn't doing well.

The participants suggested that the retirement plan investment decisions were not necessarily recognized as high-consequence in early life stages. To respond to earlier, suboptimal investment decisions, the women adapted their investment choices over time. Some women experienced later disappointment or regret due to a failure to consider how their goals might change over time. The women reported that they adapted toward a more appropriate asset allocation and thus displayed more appropriate life cycle behavior. The following comments demonstrated this phenomenon:

When I first started with deferred compensation, I didn't understand anything and just put it all in the guaranteed fund, and now I have it all in the stock market to try and play catch up.

When we were in our twenties, I think we just looked at what our financial advisor was telling us was a long-term investment. I don't know that we even thought about the type of investment that it was or whether it was earning 9.5% or 10%. We just knew that it was better than putting the money in a savings account, but I don't think we really thought about it until we were in our forties.

I first started investing 19 years ago when I invested with the state, and I didn't really know. So, I just started in the deferred compensation plan. Not until college did I start to understand what it meant to invest, and so I started investing. I moved back in with my mom in March and really know how important it is now.

Been with the state for 28 years and then in deferred comp in 1983 starting with the minimum. I wish I knew then what I know now, and I would have added more then.

Understanding Trade-Offs

Deciding to keep a stock-heavy mutual fund that experienced significant losses for expected future return meant the participants had to make explicit trade-offs. This indicated a more extensive, rational processing of the information. The comments below indicated that some participants did employ a degree of compensatory decision making despite their overall tendency toward selectivity and simplification. The comments further underscore that some women were aware of the trade-offs among key fund attributes:

You don't want to put all your eggs in one basket. You have to ask yourself what happens if things go bad for where you work and they go bad for your investment. It might be okay to start that way though, but don't put all your eggs in one basket.

I also purchase funds representing the S&P 500 of which I have lost a third. But I just close my eyes and hold my breath and think it will go back up.

For mutual funds, I contacted my stockbroker to get advice from him. He knows that I am aggressive and that he likes mid-caps. So I looked at returns and picked the highest ones on the chart. I don't really worry about the fluctuations because I know the chart shows it goes up a few years and then it is down. I don't worry because I made some money on them in the past so it offsets it. I know that if I pick the ones that are more aggressive I am going to come out ahead.

You think they are diversified, but you'll find what I found in my annuity once. I was trying to choose stocks that had done well in the past 5 years, but they were investing in the same companies, you know [company name], things of that nature and technology. So when the market went down, they all went down. Here

I thought I was diversified, but they all went down because I was overlapping a little bit.

Discussion

Taken together, the focus group participants expressed their information deficits and reliance on simplified, lexicographic decision making strategies. The decision making process often was experienced as conflict-laden and stressful. To resolve this problem, the participants searched for guidance among friends and coworkers who seemed more familiar and experienced with the investment task. Many participants also worked with financial advisors, a sometimes rewarding, sometimes disappointing experience. After making investment decisions, some of the participants displayed avoidance behavior. Others liked the trading aspect of investment decision making and revised their investment decisions on a regular basis. Over the long run, as the participants became more familiar and experienced with investments, they reported more extensive decision making strategies that involved explicit trade-off considerations. The discussion below first presents the findings that support the accuracy-effort goals outlined by Bettman et al. (1998). Then, the emotional aspects of the choice processes in the participants' decision making are discussed.

Evidence for Accuracy-Effort Considerations

In line with the notion of "bounded rationality" (Simon, 1955), the women tended to construct their investment preferences for mutual funds during the decision making process. The observed lack of investment information, reliance on simplified decision heuristics, and dependence on decision making guidance from others characterized the constructive choice processes. Interestingly, the need for information amidst the wealth of investment information, which usually is provided by employer-based retirement plans and is available through the media and financial advisors, points toward these investors' lack of both factual and procedural knowledge. The lack of factual knowledge as expressed by the participants corresponds with empirical studies that employed investment knowledge measures (Merrill Lynch Investment Managers, 2005; NASD Investor Education Foundation, 2003; Oppenheimer Funds Distributor, 2004). The comments of the focus group participants show that the amount of missing investment information affected the participants' procedural knowledge and increased the uncertainty about how to proceed in the investment decision (Hogarth, Michaud, & Mery, 1980).

Consistent with the literature on high-consequence decision making, the women's intuitive resolution was to follow simplified decision heuristics. Prior studies show that in complex environments [e.g., when the number of alternatives is greater than three or when the number of attributes per alternative is relatively high (Kahn & Baron, 1995)], people tend to use noncompensatory strategies to simplify the choice set (Onken, Hastie, & Revelle, 1985; Payne, 1976; Timmermans & Vlek, 1992). The experiences of the participants in the focus groups support these findings. If a woman, for instance, decided to choose the mutual fund with the highest return in the last 5 years, then this fund would be chosen regardless of its fees or asset allocation. Past research further indicates the reasons that naive decision makers shy away from more extensive compensatory or trade-off decision making strategies: they require difficult cognitive effort and explicit resolution of difficult trade-offs, whereas noncompensatory decision strategies avoid the conflict (Kahn & Baron, 1995).

The tendency of women investors to value past performance above everything else might be influenced by popular media sources that generally use some rating system to categorize funds based on past performance. Assuming they have sufficient credibility, such rating systems may reinforce the impression among this group of investors that past performance is predictive of future performance and also that they should invest their money in the mutual funds rated with better performance. Moreover, the perceived complexity of the information environment, the digestible format in which the ratings often are published, and the credibility of the source serve to heighten the probability that lower knowledge investors will follow the implied recommendations (Lichtenstein, Kaufmann, & Bhagat, 1999).

Although the women who reported low investment knowledge likely would benefit the most from an extensive information search, they seemed less likely to engage in one. The comments in the focus groups confirm the tendency to "look for an easy way out" (Agnew & Szykman, 2005, p. 59). Past studies acknowledged the link between low subject-matter knowledge and low procedural-source knowledge, a combination that raises the cognitive cost of search (De Bont & Schoormans, 1995). For instance, the online sources with which many of the women were familiar were likely to be better known, more convenient, easy-to-use, and cognitively assessable. Affirming Fiske et al. (1994), investors may limit their search because they know too little to even begin a more extensive search process.

In situations where the stakes were high and the participants perceived a need for compensatory decision making processes, another natural resolution was to look for decision aids or rational agents to help employ compensatory strategies (Kahn & Baron, 1995). Although the focus group participants generally seemed to avoid compensatory decision making strategies, they wanted their agents to use these rules in making the high-stakes investment decisions. The findings support the idea developed by Kahn and Baron (1995) that if women believed that trade-offs were difficult or painful to make and that compensatory rules were difficult to implement, they preferred to have a friend or coworker make the decision for them. This finding is also consistent with the peer group effects on savings decisions described by Duflo and Saez (2002). In the consumer decision making literature, such behavior is considered to respond to a desire to "conserve cognitive energy" (Kahn & Baron, 1995) and can be understood as an adaptive response to this specific decision making situation (cf. Payne, Bettman, & Johnson, 1993; Tversky & Kahneman, 1986).

The constructive nature of choices implies that processing approaches may change as women learn more about mutual funds during the course of making investment decisions. Over time, the focus group participants gained familiarity with the investment decision making process and gained computational skills and expertise. With the increase in the ability to analyze and select the most relevant information, they were able to evaluate trade-offs and to assemble a more diversified and personalized investment portfolio. These findings underscore the adaptability of the participants' investment decisions (Alba & Hutchinson, 1987; Russo & Leclerc, 1994; West, Brown, & Hoch, 1996). Even though the quality of an investment decision is difficult to define, a more diversified portfolio generally indicates higher quality. Contrary to the Kunreuther et al. (2002, p. 263) notion of "failures to learn," the focus groups provide empirical evidence for learning from experience in high-consequence choices.

Evidence for Emotional Considerations

Bettman et al. (1998, p. 193) asserted, "Humans are emotional beings, and choices can involve wrenching trade-offs." They further added that emotions arise when there are conflicts among goals that are important to the individual. As much as the focus group participants' investment decisions were based on weighing decision accuracy versus effort, the decision making was still highly influenced by emotion. The findings show that the participants struggled to make sound investment decisions for their retirement funds while trying to keep the effort and the emotional involvement during the decision making process within limits. An example of such stressful investment choices includes balancing the quality of the investment decision against the effort necessary to gather more detailed information about a mutual fund. Another example of trade-offs that the participants were hesitant to make includes compromising the accuracy of the decision by handing the decision making over to a financial professional.

With respect to the emotional aspects of the participants' investment decision making, the findings also support the view of Bettman et al. (1998) that individuals may apply two general coping strategies in emotion-heavy situations: (a) problem-focused coping describing the desire to alter investment decisions (cf. Folkman & Lazarus, 1980, 1988) and (b) emotion-focused coping describing the desire to avoid further contact with the investment decision (cf. Lazarus, 1991). Contrary to Bettman et al., these two forms of coping were not observed simultaneously in the focus groups. Quite the contrary, the two coping strategies were mutually exclusive: The women either engaged in trading investments on a regular basis, or they completely avoided dealing with it (cf. Folkman & Lazarus, 1988; Terry, 1994).

With regard to problem-focused coping, the findings confirm the view of Bettman et al. (1998) that the women's decision making process involved attempting to identify the most accurate decision alternative. For instance, the participants who actively traded funds perceived improved portfolio performance. However, the findings do not confirm that this choice process particularly is associated with extensive processing (Bettman et al., 1998). The women mostly continued using simple, lexicographic decision making heuristics (e.g., relying exclusively on the most recent performance of a mutual fund). Similarly, the Bettman et al. conclusion that increased negative emotions would promote more extensive processing rather than more avoidant behaviors was not supported by the participants' investment decision making. Only over time, when some of the women became familiar and more experienced with the investment decision making, was more extensive processing apparent.

With regard to emotion-focused coping, the observations confirm the view of Bettman et al. (1998) that the complexity and difficulty of the investment decision may lead

to avoidant behaviors. The participants' reactions, such as not reading statements, avoiding investment research, or reconsidering their investment choices, are examples of this behavior. From these observations, it is not known whether action or refusal to act provides the better strategy for the women. According to Kahn and Baron (1995), not dealing with the investment decisions at hand or not revising the decision once made is making a decision. This method of coping is generally considered less than ideal. For the sake of decision making accuracy, one might advise following wealthy American investor and business man Warren Buffet's recommendation: "The stock doesn't know you own it. You have feelings about it, but it has no feelings about you. The stock doesn't know what you paid. People shouldn't get emotionally involved with their stocks" (Pulliam & Richardson, 2005, p. A1).

Conclusions and Implications

Using qualitative methodology, this research study explored the issue of mutual fund investing by women investors. The goal was to provide an account of the investment decision making process for women in contemporary society as a step toward understanding the complexity and difficulty of this decision under current conditions. The study does not attempt to make claims about the representativeness of the extracts. The focus group setting at the "Women & Money" conferences in Ohio, the interviewer's personality, the characteristics of the women who volunteered to participate, and the group dynamics are unique, and the findings may not apply to the larger population of women investors. Following Lunt (1996), the work is meant to be suggestive for future research about investment choice processes rather than to be an end in itself.

The present study contributes to the literature on investment decision making by examining the choice processes of women investors. In particular, it addresses decision accuracy, cognitive effort, and emotional trade-offs evoked in this high-consequence decision task. The study suggests that women's investment decision making is a compromise between the goals of increased accuracy and the desire to limit cognitive and emotional effort. The observed lack of investment knowledge, reliance on simplified decision heuristics, and dependence on decision making guidance from others characterize the accuracy-effort dichotomy. The negative stress experienced while making the investment decisions and the resulting coping strategies characterize the emotional aspect of the choice process. The influence of emotion on the accuracy-effort consideration might explain why the participants struggled to choose a strategy that maximized the expected benefits given the costs of information acquisition and computational effort. The involved trade-offs also may explain why the participants experienced the mutual fund decision as difficult, complex, and demanding, why they adopted easier-to-use noncompensatory strategies, and why many relied on agents to help employ compensatory strategies that they felt were required when the stakes were high.

An interesting perspective on how financial educators and financial advisors can use the findings of this focus group study is provided by Prochaska, Norcross, and DiClemente's (1992) transtheoretical model of behavior change (TMM). The researchers argued that successful change of behaviors, such as smoking, involves a progression through a series of stages. They further identified relatively distinct processes associated with each stage, which are distinguished by differing levels of involvement. According to TMM, women investors who have no intention to reassess their behaviors by using noncompensatory, simplified heuristics are likely to belong to the *precontemplation* stage. During the *contemplation* stage, individuals reflect on why they are doing what they are doing and whether they really want to do it. The participants who considered trade-offs most likely match this stage. Self-checking processes related to values clarification and goal alignment are important at this stage (Koestner, Lekes, Powers, & Chicoine, 2002). During the *preparation* stage, people form an intention to change the behavior and perhaps also take some small action in that direction. According to Prochaska (2000), these are the individuals generally considered the most responsive to professional advice or educational intervention. During the *action* stage, people actively modify their behavior to reach their goals. Common processes during this stage are substituting alternatives to encourage information search, eliciting stimuli that promote information search, and restructuring one's environment to create highly effective cues (Koestner, Lekes, Powers, & Chicoine, 2002). The formation of implementation intentions to actively acquire investor information, for instance, can address all three of these processes (Gollwitzer, 1999).

Prochaska, Norcross, and DiClemente (1994) noted that it is common for people to overlook the final stage, *maintenance*, and they highlighted the crucial importance of constantly working toward the behavioral goal. Women practicing a compensatory decision making strategy exemplify the maintenance stage. Their focus on maintaining a high level of information is vital because the progression

of change, according to Prochaska and colleagues, is spiral in nature, not linear. Recycling through the stages occurs quite frequently as individuals attempt to modify behavior. For example, as education and household income change throughout a person's life, the search for investment information may change accordingly. Relapse might occur during demanding life stages that leave little time for dealing with investment decisions. Prochaska's (2000) spiral model suggests that most relapsers do not revolve endlessly in circles nor do they devolve all the way back to where they began. Rather, they potentially learn from earlier experiences and, for instance, may only retreat from an action or maintenance stage to the preparation stage of searching for investment information.

A task for future researchers is to determine under what circumstances the goals of women's investment decision making become more salient. Would women use compensatory decision making strategies if they had more time, more information about the options, or more certainty about their goals as proposed by Kahn and Baron (1995)? If so, would the emotional involvement diminish? Researchers might also address the relationship of women and financial advisors. What decision rules are financial advisors using when advising women investors? Would the specific characteristics of women investors prompt them to employ compensatory decision strategies, or would they retreat to an increased use of noncompensatory decision strategies when faced with tasks of increased size as proposed by Biggs et al. (1985)? What decision making strategies do women expect financial advisors to use? Does the "contrast between how these decisions should be made by rational agents and how they are commonly made" (Kunreuther et al., 2002, p. 261) contribute to the sometimes emotion-laden relationship between women and financial advisors?

Future researchers also should focus on the need to generate more systematic evidence of the efficacy and limitations of investor education (Kunreuther et al., 2002). Can ordinary investors be trained to think like rational decision makers when making these high-consequence investment decisions? What are the most effective heuristic training devices for improving the quality of these decisions? According to Kunreuther et al. (2002, p. 260), little is known "about how individuals solve the complex problems that are critical to themselves and to society," in particular how average women make fundamental decisions about accumulating adequate funds for retirement. At a minimum, the current qualitative study has shown women's investment decisions to be nonstatic, passionate, and complex, characteristics that merit further theoretical and applied research.

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Endnote

[1]No attempt was made to determine the type of advisor, years of experience, or credentials in comments about financial advisors.

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