

Real-Life Decision Making in College Students II: Do Individual Differences Show Reliable Effects?

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First-year undergraduates participated in a short-term longitudinal study of real-life decision making over their first 14 months of college. They were surveyed about 7 different decisions: choosing courses for upcoming terms (on 3 different occasions), choosing an academic major (twice), planning for the upcoming summer, and planning for sophomore-year housing. They also completed a survey of self-reported decision-making styles and the Need for Cognition survey (Cacioppo & Petty, 1982) to assess their focus on rationality and enjoyment of analytic thinking. Results showed few statistically significant correlations between stylistic measures and behavioral measures of decision making, in either the amount of information considered or the way in which the information integration tracked predictions of linear models of decision making applied to each participant's data. However, there were consistent correlations, across the 7 decisions, between stylistic measures and affective reactions to, or retrospective descriptions of, episodes of decision making. We suggest that decision-making styles instruments may better reflect the construction of narratives of self as a decision maker more than they do actual behavior during decision making.

Ask the average person on the street to describe their typical approach to decision making, and they will probably be very happy to characterize it. Some will report their approach as objective and detached, gathering much information and performing explicit analyses. Others will describe a more holistic and intuitive approach. Some will characterize their process as operating autonomously, and others will describe relying on others' input to navigate the process. Some people will say they approach decision-making tasks in a more spontaneous manner, in contrast to those who are much more deliberative and intentional. Still others will declare that they try to avoid making decisions whenever possible. But

on what do people base these self-characterizations? Does the fact that different people use different descriptors mean that they actually behave differently when making decisions? This study is an attempt to find out.

Two cohorts of first-year college students were followed longitudinally over a 14-month period as they made a variety of important real-life decisions. Each of the decisions studied is on a known timetable. Individual difference measures were included to see under what circumstances self-reported differences in approaches to decision making specifically, or cognitive tasks generally, predict differences in decision-making behavior in any of the decisions studied.

Literature on cognitive styles generally, and decision-making styles specifically, assumes that there exist stable individual differences in the ways people approach cognitive tasks, including the ways they prefer to acquire, process, and evaluate information (Appelt, Milch, Handgraaf, & Weber, 2011; Cacioppo & Petty, 1982; Rayner & Riding, 1997; Scott & Bruce, 1995; Sternberg & Grigorenko, 1997). Some previous work investigated the effects of individual differences in episodes of hypothetical decision making. Levin, Gaeth, Schreiber, and Lauriola (2002) and Lauriola, Russo, Lucidi, Violani, and Levin (2005) conducted two studies of personality variables as they relate to decision-making performance on a variety of decision-making tasks. Levin et al. demonstrated significant correlations between personality traits and the effectiveness of attribute and risky choice framing effects. Lauriola et al. corroborated their findings by showing an interaction between personality characteristics and the impact of framing effects on hypothetical risky, health-related decisions. In another study, Levin and colleagues (Levin, Huneke, & Jasper, 2000) studied students with either high or low Need for Cognition (NFC) scores (Cacioppo & Petty, 1982) as they engaged in a hypothetical information search task investigating which of a set of notebook computers to purchase. Participants with higher NFC scores were more successful in an adaptive decision-making task than those with lower scores.

In all these studies, the decision making studied was hypothetical; that is, the decision makers were not actually selecting an outcome that had relevance for their own goals and future. Although hypothetical decision making may predict real-world decision making, there is good reason to be skeptical of a direct correspondence between the two (Galotti, 1989). In real-life decision making, for example, agents have to construct their own list of options, consider their own goals and values, and decide how and how much information to gather. Thus, in the research to be reported here, we focus on people who are facing real-life choices that are likely to affect their long-term academic and possibly career goals.

To measure decision-making styles, we adopted the proposal of Scott and Bruce (1995). Their survey instrument assesses five distinct stylistic dimensions: rational (characterized by a thorough search for and logical evaluation of alternatives), intuitive (character-

ized by a reliance on hunches and feelings), dependent (characterized by a search for advice and direction from others), avoidant (characterized by attempts to avoid decision making), and spontaneous (characterized by a sense of immediacy and a desire to complete the process quickly). They tested their survey instrument not only with undergraduates but also with military officers and graduate students. A subsequent and independent assessment of the psychometric properties of their instrument confirmed the existence of the five styles identified by Scott and Bruce (Loo, 2000).

We also included the NFC measure (Cacioppo & Petty, 1982), because of its previous use in the decision-making literature and because, theoretically, it would predict stronger engagement in important cognitive activities, such as real-life decision making. This 34-item survey assesses a person's motivation to take on intellectual tasks and challenges. People with high NFC seem more likely to enjoy the kinds of endeavors that involve thinking, problem solving, and reasoning and to derive more satisfaction from accomplishing an intellectual challenge than do people with a lower NFC. Klaczynski and Fauth (1996) demonstrated no significant relationship between NFC and cognitive ability, suggesting that NFC really is a stylistic dimension, not derived from intellectual power such as IQ. They also showed that low-NFC people were more likely to drop out of college than high-NFC people, suggesting that styles can and do affect important life outcomes. Moreover, Stanovich and West (1997, 1998, 2000) have gone on to show that cognitive style measures such as NFC correlate with performance on a variety of specific reasoning and decision-making tasks.

Much of the literature on decision-making styles, including the studies cited earlier, has been limited to self-report measures of general decision making, unconnected to specific decisions made. That is, respondents are asked to describe how they typically make decisions instead of being observed as they actually face one or more specific decisions. This approach neglects the possibility that people may perform very differently when they face very different kinds of decisions or that they may not have insight into how they make decisions. Our objective in this study was to investigate individual differences in self-reported decision-making styles as they related to actual behaviors while making specific decisions.

STUDY

First-year college students were followed in four sessions over a 14-month period. At each session, participants filled out various survey instruments, including instruments concerning seven specific decisions: choosing courses for their second term, choosing courses for their third term, choosing courses for their fourth term, choosing a major (asked about twice, once in the second and once in the fourth session), making plans for the summer after the first year, and choosing student housing in the second year (both surveyed in the third session).

For each decision, we counted the number of options the participant reported under active consideration, the number of criteria they reported using to decide between these options, and the calibration of the participants' holistic ratings of the overall goodness of options with the predicted ratings of various linear models (described in more detail later). For each decision, we also measured the participant's affective reactions to, and post hoc descriptions of, the decision-making episodes.

The more information is considered in making a decision, the more thinking is needed, so we predicted that people who enjoy thinking (i.e., those high in NFC) to consider more information in our tasks. We also expected that people who reported themselves as more rational would consider more information and integrate information more in accordance with linear (including normative) models of decision-making than those who did not. However, we made no specific predictions about whether different individual difference measures would correlate with various affective reactions to the decision-making process.

METHOD

Participants

Participants were first-year students at Carleton College. Specific details about the participants are contained in the companion article (Galotti, Wiener, & Tandler, this issue).

Materials

A number of different instruments were administered during the different sessions,¹ but only the ones rel-

evant for this article will be described here. Moreover, some instruments are more fully described in the companion article (Galotti, Wiener, & Tandler, this issue).

Stylistic Measures

THE GENERAL DECISION-MAKING STYLES SURVEY (GDMS).

This survey, adapted from Scott and Bruce (1995),² asked participants to rate agreement with statements about how they make decisions in general. The 30 statements divide evenly into five different scales, each purporting to measure a distinct approach to decision making: rational, intuitive, dependent, avoidant, and spontaneous. Example items pertaining to these respective scales are the following: "I make decisions in a logical and systematic way," "When I make decisions I tend to rely on my intuition," "I often need the assistance of other people when making decisions," "I avoid making important decisions until the pressure is on," and "I generally make snap decisions."

NEED FOR COGNITION (NFC).

This instrument, developed by Cacioppo and Petty (1982), consists of 34 statements that measure a person's tendency to engage in and enjoy effortful cognitive activity, such as reasoning or problem solving. Example items include "I really enjoy a task that involves coming up with new solutions to problems" or "I prefer my life to be filled with puzzles that I must solve."

DECISION-MAKING PERFORMANCE MEASURES.

See Galotti, Wiener, and Tandler, this issue, for a full description of the following instruments.

Course Schedule Worksheet (CSW)
Housing Options Worksheet (HOW)
Factors and Options Worksheet (FAOW)
Overall Rating (OVRAT)

REACTIONS TO DECISION (RTD).

This 21-item survey, adapted from previous work (Galotti, 1995, 2007; Galotti & Tinkelenberg, 2009), asked participants to reflect on a specific decision (e.g., choosing courses, choosing housing), and rate (on a 7-point scale) their affective reactions and remembered approaches to it. Example items include the following: "How certain are you that you are making the right decision?" "How rushed or pressured do you feel in making this decision?" and "How much have you explored your current options for this decision?"

Procedure

Sessions were run in small groups by trained undergraduate research assistants. In the first (fall of first year) session, participants filled out a CSW and an FAOW for choosing courses for the upcoming winter term. For these two instruments, research assistants read a detailed set of instructions for each instrument and walked participants through the process of filling out the grid.³ Participants also filled out the GDMS and the NFC, reading the self-explanatory instructions and working at their own pace.

In the second (winter term) session, participants filled out an OVRAT and an RTD for winter term courses and filled out a CSW and an FAOW for spring term courses as well as an FAOW for declaring a college major (at the college in which these students were enrolled, majors are not formally declared before the sixth or spring term of the sophomore year).

In the third (spring term) session, participants filled out an OVRATs for spring term courses and for the academic major decision, RTDs for both of these decisions, a CSW and an FAOW for fall term courses, an HOW, and FAOWs for sophomore-year housing and their summer plans.

Finally, in their fourth and final session (fall term of sophomore year), participants filled out OVRATs for spring term courses, housing, and summer plans, an FAOW and OVRAT for their academic major declaration decision, and RTDs for the three decisions they considered in the third session and the academic major decision they considered in the fourth session.

GDMS plus the NFC), using coefficient α as the measure. The mean α was .87, and each subscale showed good internal reliability (see the diagonal of Table 1). We next computed the correlations between these stylistic measures, finding a little more than half of them were reliably, but not highly, intercorrelated (Table 1). We thus retained each of the measures for subsequent analyses.

Correlations With Behavioral Measures

We first examined correlations between the five decision-making style scores and different measures of decision making, focusing on the relationship between a rational self-reported style or preference and the amount of information participants reported considering. The amount of information considered was looked at in three ways: the number of options and the number of criteria participants listed for each of the seven decisions, and “decision map size,” the number of options multiplied by the number of criteria. We correlated these dependent measures with the five decision-making style scores and the NFC score. Higher scores on the rational decision-making subscale or on NFC did not correlate with increased usage of information for any of the decisions. In fact, the individual difference scores did not predict information usage well at all: For the 42 correlations run on number of options listed, only 3 achieved statistical significance. The same was true for the 42 correlations run on number of criteria listed, and for the decision map measure, only 4 of 42 correlations achieved statistical reliability. No pattern was discernible for these significant correlations. Table 2 presents

RESULTS

We first examined the internal reliability of the six individual differences scales (five subscales of the

TABLE 1. Intercorrelation of Individual Difference Measures^a

	Rational	Intuitive	Dependent	Avoidant	Spontaneous	Need for cognition
Rational	(.80)	-.33***	.19*	-.23**	-.57***	.24**
Intuitive		(.87)	.04	.02	.44***	-.10
Dependent			(.81)	.30***	-.10	-.26**
Avoidant				(.89)	.10	-.36***
Spontaneous					(.87)	-.27**
Need for cognition						(.89)

^aBased on data from 149 participants. Internal reliabilities for each scale, computed with coefficient α , are presented in the diagonal in parentheses.
* $p < .05$. ** $p < .01$. *** $p < .001$.

TABLE 2. Correlations Between Individual Difference Measures and Behavioral Measures of Decision Making

	Decision: individual difference measure	Winter courses	Spring courses	Major (first year)	Fall housing	Summer plans	Fall courses	Major (sophomore year)
A. Number of options								
	Rational	-.01	.02	-.05	-.10	.03	-.13	-.15
	Intuitive	-.08	-.01	.13	.10	-.06	-.16	.10
	Dependent	-.04	.04	.11	-.02	.23**	.02	.16
	Avoidant	.09	.21*	-.02	-.14	-.07	.30**	.14
	Spontaneous	-.10	-.13	.15	-.02	-.03	-.05	.16
	Need for cognition	.14	-.01	.09	-.05	-.06	-.15	-.05
B. Number of criteria								
	Rational	-.20*	.03	.12	-.11	.01	.01	-.08
	Intuitive	.18*	.12	.04	.10	.00	.12	.03
	Dependent	-.01	.10	.03	.04	-.08	.06	.02
	Avoidant	.15	.06	-.16	-.01	-.01	.11	.05
	Spontaneous	.17*	.06	-.04	-.03	.05	.13	.09
	Need for cognition	-.03	.00	.08	-.05	-.01	-.07	.01
C. Decision map size								
	Rational	-.10	-.00	.02	-.11	-.04	-.10	-.18*
	Intuitive	-.01	.02	.11	.12	.03	-.08	.08
	Dependent	-.07	.10	.11	.02	.22**	.09	.14
	Avoidant	.11	.14	-.10	-.11	.04	.25**	.15
	Spontaneous	.01	-.12	.02	-.08	-.02	-.08	.18*
	Need for cognition	.12	.03	.12	-.03	-.07	-.06	-.07

* $p < .05$. ** $p < .01$. *** $p < .001$.

these correlations, separately for each of the seven decisions investigated. Panel A shows the correlations for number of options, Panel B for number of criteria, and Panel C for decision map size.

Correlations With Linear Models

A second set of behavioral measures consisted of so-called calibration coefficients, correlations of participants' overall ratings of options with the predicted values of those options by various linear models of decision making (Dawes, 1982; Dawes & Corrigan, 1974). Three linear models were considered, and each of these is described more fully in the companion article (Galotti, Wiener, & Tandler, this issue).

Scores determined from each linear model were correlated separately with the participants' overall impression (holistic) ratings of each option, as given

on the OVRAT instruments. Positive correlations indicate better calibration with the predictions of the different linear models. We had predicted that people who self-reported being rational decision makers would conform to these models better than do people who report having other decision-making styles, but this was not the case. Moreover, no pattern to the significant correlations was observed (Table 3).

Correlations With Reactions to Decisions

For these analyses we focused on the seven RTD surveys, each of which was administered after a specific decision. Recall that the instrument asked participants to rate their affective reactions and remembered approaches to the process of making a specific decision. We began with some exploratory factor analyses of the

TABLE 3. Correlations Between Individual Difference Measures and Calibration Coefficients With Linear Models

Decision: individual difference measure	Winter courses	Spring courses	Major (first year)	Fall housing	Summer plans	Fall courses	Major (sophomore year)
A. Top criterion model							
Rational	-.18	.03	-.12	-.02	.08	.09	-.02
Intuitive	.03	.07	.07	.12	-.02	.14	.04
Dependent	-.16	.12	-.09	.00	.23*	.19*	.12
Avoidant	-.08	-.07	.08	-.06	-.07	-.15	-.03
Spontaneous	-.07	-.12	.08	.06	-.10	-.01	.03
Need for cognition	.14	-.08	-.07	-.08	-.05	.13	.00
B. Equally weighted model							
Rational	-.02	.12	.14	-.03	.19*	-.01	.12
Intuitive	-.08	.06	-.11	.15	.00	.16	.08
Dependent	.06	.04	.00	.06	.18*	.07	.12
Avoidant	-.08	-.10	-.08	.06	.08	-.10	-.09
Spontaneous	-.02	-.01	-.04	-.12	-.13	.05	-.15
Need for cognition	.13	-.02	.03	-.02	-.03	.06	.10
C. Multiattribute utility theory model							
Rational	.09	-.14	.23*	-.06	.19*	.02	-.04
Intuitive	.20*	.00	-.01	.19	-.06	-.05	.07
Dependent	.09	-.03	.14	.05	.23*	.02	-.09
Avoidant	-.18*	.06	-.01	.04	.08	-.12	.08
Spontaneous	-.01	.01	-.12	-.06	-.18	.05	.08
Need for cognition	.18*	-.08	-.04	-.03	-.06	.01	.04

*p < .05. **p < .01. ***p < .001.

RTD measures (conducted separately for each different decision), and from those we created three different scales of items that seemed to go together across different decisions. We then ran psychometric analyses of each scale for each decision, looking to maximize internal reliabilities of the scales across decisions.

We identified three scales using this process. Scale 1, which we titled “Positive Reactions to Decisions,” included 4 of the 21 RTD items, specifically “How comfortable are you with the way you are making this decision?” “How much are you enjoying making this decision?” “How much is your decision guided by your overall values, principles, goals and/or objectives?” and “How certain are you that you are making the right decision?” Internal reliabilities for this scale were computed separately for each of the seven decisions and ranged from .49 to .80, with a median of .71.

Scale 2 consisted of five items and is titled “Negative Reactions to Decisions.” The specific items are “How difficult is this decision, relative to other decisions you have previously made?” “How stressful is it to make this decision?” “How likely are you to make this decision at the last minute or on the spur of the moment?” “How rushed or pressured do you feel in making this decision?” and “How much are you avoiding or putting off making this decision?” Internal reliabilities for this scale were computed separately for each of the seven decisions and ranged from .46 to .78, with a median of .71.

Finally, Scale 3 also consisted of five items and is titled “Information Gathering.” Items include the following: “How much are you using specific criteria to make this decision?” “How satisfied do you feel with the amount of information you are obtaining while

making this decision?” “How final is your current list of options for this decision?” “How well informed are you about each of your options?” and “How much have you explored your current options for this decision?” Internal reliabilities for this scale were computed separately for each of the seven decisions and ranged from .64 to .74, with a median of .65.

We next correlated these three scale scores, separately for each decision, with the six individual difference measures. Table 4 presents these correlations. More statistically significant correlations are seen in this table, and there is more of a pattern to the significant correlations than is seen in Tables 2 and 3. For example, all the significant correlations with the “Positive Reactions to Decisions” subscale are with the NFC variable, albeit only on the first few decisions we asked students about. In contrast, the “Negative

Reactions to Decisions” subscale correlates more consistently across decisions with the avoidant style score and for the first two decisions surveyed with the dependent score.

The third scale, “Information Gathering,” measures self-reported progress on making a decision: the degree to which participants report having a short list of options and specific criteria in mind and how much they have explored the information they have obtained to date. As Panel C of Table 4 shows, this scale showed positive relationships with NFC and negative relationships with the spontaneous style score, but only for the first three decisions we asked about. In addition, the rational style and the intuitive style show a positive and negative relationship with the scale, but only on the very first decision studied.

TABLE 4. Correlations Between Individual Difference Measures and Affective and Descriptive Reactions to Specific Decisions

Decision: individual difference measure	Winter courses	Spring courses	Major (first year)	Fall housing	Summer plans	Fall courses	Major (sophomore year)
A. Positive reactions							
Rational	.09	.10	.12	.07	.10	.06	.10
Intuitive	-.06	-.03	-.04	.12	.07	.00	.04
Dependent	.11	.07	.08	.06	.10	.07	.08
Avoidant	-.13	-.12	-.14	.01	-.01	-.02	-.04
Spontaneous	-.05	-.08	-.10	-.02	-.14	-.12	-.10
Need for cognition	.18*	.17*	.17*	.10	.13	.16	.07
B. Negative reactions							
Rational	-.09	-.09	-.10	-.13	-.05	-.12	-.10
Intuitive	-.02	-.01	-.05	-.01	-.12	-.01	-.02
Dependent	.24*	.18*	.15	.06	.12	.06	.01
Avoidant	.30*	.31**	.30**	.28**	.24**	.29**	.23**
Spontaneous	-.01	-.04	-.04	-.09	-.11	-.09	.09
Need for cognition	-.04	-.08	-.01	-.03	.02	-.03	.04
C. Information gathering							
Rational	.26**	.16	.14	.06	.04	.00	.08
Intuitive	-.18*	-.04	-.09	-.04	-.05	.00	-.01
Dependent	.12	.09	.14	.02	.06	.09	.06
Avoidant	-.11	-.08	-.03	.09	.05	.05	.00
Spontaneous	-.26**	-.25**	-.20*	-.05	-.15	-.12	-.06
Need for cognition	.29**	.25**	.18*	.12	.15	.12	.11

*p < .05. **p < .01. ***p < .001.

Comparison of the ratio of statistically significant to total number of correlations run in Tables 2, 3, and 4 is informative. Table 2, which correlates individual difference measures with behavioral measures of decision making, shows only 10 significant correlations out of 126 (8%). Table 3, which correlates individual difference measures with calibration coefficients, shows 10 significant correlations out of 126 (8%). In contrast, Table 4 shows 20 out of 126 correlations being statistically significant (16%).

We ran an additional analysis to test whether the average magnitude of correlations in Table 4 exceeds the average magnitude of correlations in Table 2 or Table 3.⁴ We used the absolute value of correlations to prevent negative correlations from canceling out positive correlations. Because this transformation might violate normality assumptions, we ran a non-parametric Friedman's rank test, which was not statistically significant ($p < .36$). We also ran a repeated-measures ANOVA on these data, again finding no significance, $F(2, 252) = 2.93$, $MS_{\text{error}} = .012$, $p > .05$. Thus, although there are more statistically significant correlations in Table 4 than in the other two tables, the average magnitude of the correlations in the three tables does not differ significantly.

DISCUSSION

Our results show that individual difference measures are not associated with what one does while making a decision, neither with the amount of information considered nor the way information is integrated. Instead, individual difference measures are associated with how one feels about and remembers making decisions. This picture suggests in turn that individual difference measures cannot be taken at face value as indices of what people do or how they actually approach real-life decisions.

The individual difference measures we used all had very good internal reliabilities, and each has been used in published studies by numerous investigators. Thus, their lack of correlations with the behavioral measures or the calibration coefficients is not simply a matter of the former measures having unreliable psychometric properties.

A critic might argue that our behavioral and calibration measures do not capture every important aspect of the decision-making process. We agree.

Thus, we cannot claim that there are no individual differences in decision-making behavior. However, with regard to self-reported rationality or NFC, we have shown these do not correlate with behavioral measures indicating how much information a decision maker chooses to use or consider in making a choice. Moreover, calibration coefficients, which index at least some aspects of how well decision makers integrate all the information gathered, according to their own values, goals, and priorities, do not correlate with any of the individual difference measures we used, including rationality or NFC.

One might raise questions about the reactivity of the way we asked participants to describe their decision-making process. Specifically, one might wonder whether having participants complete a grid that crosses options with criteria, assigning importance weights to the criteria, and rating each option on each criterion might alter the natural decision-making processes of some or all participants. Might the imposition of a common framework for making these decisions mask individual differences in approaches that participants might adopt when left to their own devices? In the companion article (Galotti, Wiener, & Tandler, this issue) we describe why, based on some of our previous work, we do not think that reactivity is a big issue. However, it is one we cannot absolutely rule out, and thus this concern might warrant future investigation.

Our sample is surely not representative of the general population or even all college students. Carleton College is a highly selective liberal arts college. However, this sample is important because one can argue that these participants were likely to be highly motivated and engaged to reflect on, and articulate, the issues and options they were thinking about in making the decisions we asked them about. Thus, the likelihood of finding significant correlations might be higher for this particular sample than it would be for the general population.

The lack of correlations is generally reminiscent of the work of Pashler, McDaniel, Rohrer, and Bjork (2008), who analyzed the literature on learning styles. They noted that a whole industry has sprung up around the idea that people approach learning using different modalities or mechanisms. At the same time, the empirical evidence to support this idea is not as abundant. They considered what kinds of evidence

would support or refute the learning style claims, then they examined existing empirical studies. After all these activities, they concluded,

Our review of the literature disclosed ample evidence that children and adults will, if asked, express preferences about how they prefer information to be presented to them . . . [but] at present, there is no adequate evidence base to justify incorporating learning-styles assessments into general educational practice. (p. 105)

Although learning styles and decision-making styles are distinct, they share many similarities, including the apparent fact that there is little evidence to support the idea that they predict differences in performance.

Why then, do our students report so consistently that they have decision-making styles? Put another way, what is it that the GDMS style scores are measuring? Although we can only speculate, we believe that decision-making styles may reflect the way people construct narratives about their own decision-making experiences. That is, people who report themselves as highly rational may be emphasizing their attempts to be detached or objective or to make trade-offs, whereas those who self-report as intuitive may be recalling their emotional responses to different aspects of the experience. These selective recollections may help people see themselves as consistent across different decision-making situations, and the belief in this consistency may afford a sense of stability and predictability (Diener & Larsen, 2009).

This account might explain the discovery of significant relationships between individual difference measures and performance measures in past studies of hypothetical decision making. In a hypothetical decision making task, the participant is asked to imagine what he or she would do in a particular situation, often one far removed from their everyday experience. It seems plausible that in such a circumstance, people would consult their personal narratives about how they believe they have approached relevant past decisions and project from those narratives to the hypothetical instance before them. In effect, then, hypothetical decision-making is simply another measure of a person's view of his or her style or approach to making decisions. This possibility highlights the fact that only when one examines real-world behavior can the actual differences between style and behavior be shown.

NOTES

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1. For a complete list or copies of each instrument used, contact the first author.
2. One item was added to their rational scale, as it appeared to be missing from their published article. In addition, we added one item to each of the five scales to improve internal reliabilities. Thus, the scale we used contained 30 items, including the 24 items Scott and Bruce (1995) published.
3. Copies of instructions are available from the first author.
4. We thank reviewer John Ruscio for suggesting this analysis.

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