Residential Mobility Increases Advice Taking:
The Effects of Mobility Priming on Correcting Affective Forecasting Error

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Abstract

Affective forecasts, predictions of one’s emotional reactions to future events, play a role in decision-making. However, people sometimes make inaccurate forecasts. Research has shown that using another person's experience (surrogation information) instead of a description of an event (simulation information) can reduce forecasting errors, but people discount this advice. The present study investigates whether a mindset such as residential mobility evokes more use of the surrogate's experience. As hypothesized, when given both surrogation and simulation information, people in a mobile mindset tended to use the surrogation information more than did people in a stable mindset. My findings suggest that thinking about residential mobility makes people more willing to take another person’s experiences into account, while thinking about residential stability tends to make people discount this advice and want to decide on their own.
Residential Mobility Increases Advice Taking:
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Affective forecasts, or predictions about one’s emotional reactions to future events, can play a large role in both small and large decisions (see Wilson & Gilbert, 2005; Gilbert & Wilson, 2007 for reviews). For example, even the decision of where to go to lunch—the usual diner or the new restaurant in town—is affected by how much people forecast they will enjoy eating the food there. If the new restaurant is Macanese themed, people may have no idea what this type of food tastes like and be hesitant to try the new dishes, in comparison to the familiar dishes at the regular diner. People can make mistakes when forecasting how much they will enjoy eating a food, overestimating or underestimating how much they will enjoy the experience (McConnell, Dunn, Austin & Rawn, 2010). This leads to a discrepancy between the forecast and the experience known as an affective forecasting error. In this case, though Macanese food may seem odd and unappealing, the person who decides to try out the new dishes may actually enjoy the dishes more than they thought they would.

In the previous situation, people could look up the new restaurant's menu and decide for themselves if they would enjoy the food served there. However, another option people have is to turn to others for guidance. For example, people could search online reviews of the new restaurant, or even ask friends who have been to the new restaurant if they enjoyed their experience there. In this case, a "surrogate" would have already experienced the event (i.e., already dined at the restaurant). Surprisingly, people make more accurate forecasts if they use a surrogate’s experience without knowing anything about an event (Gilbert, Killingsworth, Eyre & Wilson, 2009) than they do if they make predictions based on a description of the event. However, in everyday life, people cannot help being exposed to both a description of the event
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(e.g., that the restaurant is Macanese and therefore serves a fusion of Portuguese and Chinese food) and the surrogation information (e.g., that a person rated it highly online). In addition, people's willingness to use surrogation information may be dependent on their own individual background. In the current study, therefore, I explored what would happen when people were given both a description of the experience (simulation information) and a surrogate's experience of an event, and I investigated whether thoughts about residential mobility would evoke more or less usage of the surrogate's experience when making forecasts about strange foods.

**Affective Forecasting**

A large body of affective forecasting research has shown that people make systematic errors when predicting emotional reactions to events (Wilson & Gilbert, 2005). For example, people tend to overestimate how bad they will feel after their favorite football team loses, when their favorite candidate loses the election, when they break up with their significant other, after they fail to get tenure, or when many people die in a grand-scale tragedy in comparison to a few people (Gilbert, Pinel, Wilson, Blumburg, & Wheatley, 1998; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000; Dunn & Ashton-James, 2008). People also tend to overestimate how good they will feel after getting revenge, after receiving an apology from someone, if allowed to return or exchange items, or after receiving a kidney transplant (Carlsmith, Wilson, & Gilbert, 2008; De Cremer, Pillutla, & Folmer, 2011; Gilbert & Ebert, 2002; Smith et al., 2008).

When making forecasts, people typically generate a mental simulation of the event and how it will make them feel. However, people are surprisingly inaccurate at mental simulation (Gilbert & Wilson, 2007). For instance, people tend to imagine the essential features of events. When asked to forecast how they would feel after being assigned to certain houses on campus, students incorrectly focused on what they considered to be the essential physical features of the
houses, but failed to notice inessential features such as social life, even though the latter turned out to have a large impact on their happiness (Dunn, Wilson, & Gilbert, 2003). People are also unaware that their simulations are influenced by their current mental and physical states. For example, people who were hungry failed to recognize that they would rather have spaghetti for dinner than breakfast, and people who were in a negative mood who were motivated to enhance their current mood (i.e., reflective instead of ruminative) tended to make more positive predictions about future events (Gilbert, Gill, & Wilson 2002; Buehler, McFarland, Spyropoulos, & Lam, 2007).

As well, when people try and recall past events to forecast emotions for similar future events (e.g., going to the dentist even though this is a very routine event), they are also prone to make errors. For example, people tend to recall atypical memories of events when simulating similar future events, such as using a favorite previous experience of a watching a winning game to predict how they will feel in response to one in the future (Morewedge, Gilbert, & Wilson, 2005). In addition, people fail to learn from previous forecasting errors because they fail to recall that they committed an error in the first place; when asked to recall their original forecast, people unconsciously adjusted their original forecast to match their actual experience (Meyvis, Ratner, Levav, 2010). Also, people who realized that they had overestimated how happy they would feel after receiving positive feedback still could not generalize this realization when asked to immediately forecast their emotional reactions to a similar event (Wilson, Meyers, & Gilbert, 2001). People who had already received kidney transplants still predicted feeling awful if they had to go through the same pre-transplant experience again even though current patients who needed kidney transplants reported feeling quite happy, indicating that people also misremember exactly how they felt when recalling an event in the past (Smith, et al., 2008).
While simulating events, people are also prone to focalism, where they fail to recognize that other future events may cancel out the emotional impact of any one event (Wilson et al., 2000). Although an event such as a favorite candidate losing an election may seem upsetting, there are many other unforeseen future positive and negative events (e.g., social gatherings, bad weather) that will balance out this emotion. For example, people who thought they would be unhappy in a physically unappealing dormitory (e.g., one farther away from campus), were just as happy as people who were assigned to a physically appealing one, because they focused only on the hassles of getting to class in the morning but forgot that making friends would buffer these hassles (Dunn et al., 2003). People who focused on event-related information rather than event-unrelated information were in general more likely to make extreme forecasts, which was enhanced if this information was easily retrieved (Keller & Bless, 2009). Indeed people tend to focus on what they can think of easily; and related to this, people who believed that they would be thinking about a football game in the days following the game made more extreme forecasts about how they would feel if their team won or lost (Wilson et al., 2000). However, when people were asked to write a diary entry detailing what they were going to do or think about in the future, or to think of a typical day in their lives, they were able to recognize the many other buffering events that occur in their lives and compete for their attention, and therefore made more moderate forecasts. Taking the focus off of the event, whether it was a positive event such as winning a football game or a negative one such as learning about a tragic event, was enough to correct people's forecasts so that they resembled their experienced emotion.

Finally, people suffer from immune neglect, a failure to recognize that they possess psychological mechanisms that buffer negative emotions and bring them back to a base level (Gilbert et al., 1998). For example, people forecasted that they would feel equally bad if they
received negative feedback regardless of whether the feedback was computer generated or given by another person. However, people actually experienced less negative feelings if they knew that a computer gave them that negative feedback because then they could blame the computer for spouting faulty feedback, whereas if they knew that the feedback came from a real person, they had no one to blame but themselves and therefore found it harder to self-enhance. People expect to like an item more if they are allowed to return or exchange it, but in reality, items that are not refundable or exchangeable are more likeable. This is because when a choice is irrevocable, people are better able to rationalize choosing that specific item rather than an alternative (Gilbert & Ebert, 2002). Also, people expect revenge to be a cathartic and mood enhancing experience (Carlsmith et al., 2008). However, those people that actually were given the chance to punish someone else tended to ruminate on the event more, actually decreasing their mood.

Immune neglect is related, therefore, to people's ability to make sense of events and their emotions (Wilson & Gilbert, 2008). When something relevant or uncertain happens, people attend to the event. Then, people react to the event: the event elicits an affective reaction. After this, people explain the event away, applying various psychological strategies so that the event loses its importance to the self or becomes understandable. Finally, people adapt to the event and stop attending to it. The event loses its significance, and people stop reacting emotionally. This combination of immune neglect and focalism contribute to faulty mental simulation which leads to what I will refer to as affective misforecasting, or affective forecasting error, the discrepancy between a person's forecast and their actual experience.

**Correcting Affective Forecasting Errors**

While there have been many efforts by researchers to correct affective forecasting errors, these strategies have largely been unsuccessful or require a lot of constant effort. For example,
participants who were asked to imagine a typical day of their lives or complete a "diary entry" about how much time they would spend thinking about a specific event (e.g., winning or losing a football game) or spending time on other events did exhibit less error (Wilson et al., 2000). However, this was at a cost to having people sit down and think about all the other events that go on in their lives, something that is not always easily thought of when making a quick judgment of future affect. Also, people find it difficult to learn from past lessons. People who overestimated their emotional reactions to a positive event and then actually experienced the event still could not apply this experience when immediately asked to forecast how they would feel if faced with other events in the future (Wilson et al., 2001). On the other hand, those who experienced a negative event did subsequently moderate their forecasts towards other negative events, but because they had denigrated the event and only if these other negative events were similar to the first. Also, people have a hard time remembering what they forecasted in the first place (Meyvis et al., 2010). These findings suggest that people have difficulty applying lessons learned about affective misforecasting to other events or even similar events at other times.

People who are more mindful, or who are often aware of their internal states and are less judgmental of their states, commit less forecasting error (Emanuel, Updegraff, Kalmbach, & Ciesla, 2010), suggesting that if people were trained to become more mindful of themselves, they would predict their emotions more accurately. Also East Asians tend to make moderate forecasts because they tend to think holistically while Westerners tend to think analytically (Lam, Buehler, McFarland, Ross, & Chueng, 2005). A holistic thinking style led East Asians to focus less on event-only information and consider that other events may be occupying their attention. This suggests that if people were trained to think holistically, they could also make more accurate forecasts. However, none of these suggestions offer immediate results and are rather dependent
on people's personality and cultural background or people's ability to learn these ways of seeing the world with training.

More feasible are people's connections to each other and therefore each others' experiences. Gilbert and Wilson (2007) make the point that an actual experience of an event is infinitely more rich and detailed than a person's faulty mental simulation of the same event. People who wish to immediately gauge how much they would like something need only ask someone else who has already experienced it, or look up reviews of it online. For example, to figure out how good a recent film is, a person need only look up reviews online from people who have already seen the film on the Rotten Tomatoes web site, or ask a friend who has already seen it how much they liked it. This is known as surrogation information (Gilbert et al., 2009).

A few studies have already highlighted the value of another person's experience in correcting affective forecasting error (Gilbert et al., 2009; Walsh & Ayton, 2009). In a speed dating study, some female surrogates met another man in a speed date and then rated how much they enjoyed their conversation together (Gilbert et al., 2009). Then, other female participants were asked to predict how much they would enjoy speaking with the male. Some of these participants were given the speed dater's profile (simulation information) while others were simply given a randomly chosen surrogate's ratings of how much she had enjoyed the conversation (surrogation information) but did not get any information about the date. After forecasting how much they would like the speed date, participants actually met the man and then rated how much they enjoyed the meeting. The people who received the surrogate's ratings made more accurate forecasts than those who received the dating profile and had to rely on their simulation of the event. Similarly, people were more accurate in predicting how they would feel about getting negative feedback from a peer if they received a surrogate's rating. However, when
people were asked which type of information they would prefer to have when making predictions, most preferred the simulation information, presumably because they thought they held different opinions from the surrogate and would prefer to decide for themselves.

In the real world, people do not search for other's reviews of a certain restaurant without also knowing a little bit about the restaurant (e.g. the menu). People usually receive both types of information. To mirror this real life dynamic, researchers gave people either a description of a chronic disease (simulation), the happiness ratings of some people who had the disease currently (surrogation), or both of these (Walsh & Ayton, 2009). Though people in these studies had no real chance to experience the event (i.e., getting the disease), experimenters compared their forecasts to the surrogate's experience ratings and looked at how similar people's forecasts were to the original surrogates. Again, people who received surrogation information made forecasts closest to the original surrogates, followed by people in the both condition, and finally the simulation condition. However, again, people discounted the surrogation information, adjusting from the surrogate rating they received. This was shown to be even more pronounced in the both condition, where people tended to base their forecasts primarily on their mental simulation of the disease. However, these people were still affected by the surrogate's ratings, as their forecasts were closer to the surrogates' original ratings than the people who received simulation information alone.

It is not a surprise to learn that people do not fully trust other people’s reactions to an event. For example, people tend to judge their emotional reactions as more extreme than others (Chambers & Suls, 2004). People who heard appealing songs expected that others would like the songs less than they did, and those who heard unappealing songs expected that others would like the songs more than they did. Indeed, the participants in Walsh and Ayton's study (2009) still
adjusted from the surrogation information they received even if they were told that the information they received was the average opinion of a thousand surrogates. Other reviews of advice taking studies where the decision making task was not related to affective forecasting, but rather estimation tasks (e.g., "What year was the Suez Canal opened?")], also found that people have a tendency to weigh their own estimates more heavily and discount another's advice (Yaniv, 2004; Bonaccio & Dalal, 2006). In these studies, people also were more accurate when they used the other person or group's advice, but still they discounted this advice.

**Residential Mobility**

In the current study, I wanted to study factors that would affect discounting of a surrogate's advice and advice taking tendencies in a broader sense. For example, previous advice taking research with the same estimation tasks found that power is an individual difference that affects how much a person takes another's advice, namely that the more power people felt in terms of their relationships with other people (e.g., friends, peers), the more they discounted another person's advice (See, Morrison, Rothman, & Soll, 2011). However, my study of course was concerned with decreasing affective forecasting errors.

Therefore in the current study, I chose a socioecological factor: residential mobility. In a general sense, I investigated how residential mobility influences correcting affective forecasting error. I therefore investigated whether priming participants with residential mobility evoked a tendency to use a surrogate's ratings in their forecasts, significantly reducing affective forecasting error in comparison to participants primed with residential stability. There has been an ever growing body of research in the psychological effects of residential mobility on people's feelings, actions, and thoughts (see Oishi, 2010; Oishi & Kisling, 2009 for reviews).
On one hand, research has shown that residential mobility can partially explain the development of independence, while residential stability can explain the development of collectivism (Oishi & Kisling, 2009). Frequent moving leads children and adolescents to stop associating their identities with any local people or groups, because they are often required to fashion new friendships and join new groups with every move. As a result, children learn to base their identities not on ever changing group memberships and roles, but instead on enduring traits and abilities. In an empirical study (Oishi, Lun & Sherman, 2007), people were asked to report the number of times they moved before age five. They were also asked to list five personality traits and five groups that they belonged to and then rate how central this was to their identity. As history of residential moves increased from 0 to 1 to 2 moves, the more central their personal self (i.e., personality traits) became. As well, people with a history of moving reported fewer group affiliations and that they were less central to their identity. When interacting with another person, people with a history of moves showed more positive affect when the other person perceived their personal self correctly whereas those without a history of moves reported more positive affect when their collective self was perceived correctly by the other person. Residential mobility therefore encourages people to associate their self with more stable traits and skills. This leads to more positive affect during social interactions if the other person can perceive their stable personal self accurately. In this sense, mobility evokes independence, which is associated with uniqueness, and choice (Kim & Markus, 1999). Mobility therefore could be associated with more discounting of the surrogate's advice.

Residential mobility is also negatively correlated with collective efficacy, in which members of a community are less willing to help and support each other and the community as a whole (Oishi et al., 2007). Cities' average level of residential mobility was associated with a
decrease in procommunity action demonstrated in a decrease in purchasing of critical habitat licenses, and a pattern of attendance at baseball games dependent on local team performance. In an experimental study, mobility was associated with a decrease in helping behavior in a group. People assigned to a stable group offered more help during a competitive trivial pursuit game to a likeable, in-group confederate who needed help answering the trivia questions. In this sense, mobility is also associated with less likelihood to help, which could be another reason why it leads to a discounting of another's advice. If mobile people themselves do not often give advice, they may prefer not to use other people's advice.

On the other hand, research has shown that residential mobility encourages people to seek out large shopping centers and live in homogenous suburbs, ironically decreasing their uniqueness (Oishi, Miao, Koo, Kisling & Ratiff, 2012). For example, chain stores' success was correlated with the mobility of the area in which the store was located. People who had a history of mobility tended to prefer chain stores to local stores even when told that the products sold would be the same price. In a subsequent study, people primed with either mobile (e.g. "novel") or stable words (e.g. "established") and then were exposed to some Chinese characters. Then, people were presented with a mix of the previous characters and some new characters and asked how much they liked them. Overall, the mere exposure effect was replicated where people liked the characters they had previously seen more than the new characters. However, this was more pronounced in the mobility condition than the other conditions. In another study, people were primed with either a mobile or stable writing task and were exposed to some faces. Again people in the mobility condition tended to like faces that were familiar, or had been presented to them previously, more so than the people in the stable condition. This familiarity-seeking effect was mediated by anxiety. Priming residential mobility increased anxiety and to cope with this
anxiety, people turned to familiar objects and stores. These findings suggest that priming mobility might cause people to use surrogation information *more* because it serves as that familiar face to turn to in an anxious situation. As well, the anxiety that mobility evokes may increase people's receptivity to advice. People primed to feel anxious in an advice taking study (weight estimation task) were more likely to ask for another person's advice; they also took that adviser's advice more by adjusting their initial estimate towards the advice they received in comparison to neutral and angry conditions (Gino, Brooks, & Schweitzer, 2012). This effect was mediated by self-confidence, where people who were anxious also felt less confident about their initial estimate and therefore sought out advice.

As well, in the previous collective efficacy study, when the confederate was unlikeable, surprisingly participants in the stable condition tended to help each other more, excluding the unlikeable confederate (Oishi et al., 2007). This finding implies that people in a stable community might be more likely to be xenophobic, or distrust strangers. Similarly, residential mobility was associated with a preference to be egalitarian to loyal helpers, such that people helped people who were not part of their in-group, implying that mobile people may be more likely to trust strangers (Lun, Oishi, & Tenney, 2012). Thus, stable people may be less likely to accept the advice due to their distrust of strangers, in which case the mobile people would be more likely to use the surrogate's ratings. Based on these studies, a mobility mindset should encourage people to use the surrogation information, as mobility leads people to seek familiar faces as well as trust strangers.

**The Present Study**

In the current study, I used novel food combinations as stimuli, with the "event" as the potential tasting of the food combinations. This was similar to the McConnell, Dunn, Austin, and
Rawn study (2010) in which people were asked to predict how they would feel after receiving different foods. I suspected that using unfamiliar food combinations as stimuli would elicit affective forecasting errors.

Our study was similar to previous research in comparing a condition in which people receive only a description of the foods (simulation information) to a condition in which they receive only another person’s rating of the food (surrogation information) (Gilbert et al., 2009). I also included a "both" condition in which participants received both a description of the food and the surrogate’s experience as in Walsh and Ayton's study (2009). This condition was expected to be the most interesting, as people in this condition would have to decide how much to use either the description of the foods or the surrogate’s rating when forecasting how much they would like to eat the food. As in the study by Walsh & Ayton (2009), I did not follow the forecasting step with an actual experience: I did not actually have my participants eat the food after forecasting how much they would like it. I did not then compare my participants’ forecasts with their actual experience. I did estimate the accuracy of people’s forecasts, however, by comparing participants’ predicted liking of the foods with the actual liking of previous participants who actually tasted the foods (and served as the surrogates in this study).

The primary research question was whether priming participants with residential mobility versus stability (as in Oishi et al., 2012) would evoke more or less discounting of the surrogate's advice. I made three hypotheses.

*Hypothesis 1:* Regardless of mobility prime, the people in the surrogation condition will make forecasts that are the most similar to the original surrogates' ratings, followed by the people in the both condition, and finally people in the simulation condition (as in Walsh & Ayton, 2009).
Hypothesis 2: The mobility prime will not make a difference in the simulation and surrogation conditions. Because people only receive one piece of information in these conditions, they are expected to just take that information when forecasting, regardless of priming condition.

Hypothesis 3: The mobility prime is expected to make a difference in the both condition, where people receive simulation and surrogation information. Specifically, I predicted that people primed for mobility will use the surrogation information more than people primed for stability will. Therefore, in the both condition, people in the mobility condition would make forecasts that approximate the surrogates’ original ratings more so than those in the stability condition.

Method

Overview

After completing a writing exercise designed to prime participants for residential mobility or stability, participants were asked to make predictions about how enjoyable eating novel food combinations would be, given one of three information conditions. In the simulation condition, participants received a description of the foods. In the surrogation condition, participants received no description of the foods, but instead were told how a randomly chosen UVa student had rated the foods. In the both condition, participants received both a description and another student's ratings.

Participants

Participants were 96 University of Virginia students (35 men, 61 women) who participated for course credit. Age of the participants ranged from 17 to 27 with a mean age of 19.

Materials and Procedure
Residential mobility manipulation. Participants, who were run in groups of three to four in the lab, were told that they would be participating in a study on food preferences, and that they would also have to complete a writing task. Participants completed the residential mobility prime, for five minutes. This prime was taken from a previous study of residential mobility (Oishi et al., 2011) (See Appendix A for the full text of the primes). In the mobility condition participants read:

Imagine that you are offered a job that you have always wanted. The job also involves moving to a different location every other year. Please use the space below to describe in as much detail as possible what it would be like for you to have such a lifestyle. What will it be like to live in a different place every other year? What is good and bad about it? How do you think it will affect your relationships with other people? For example, what kind of friends will you have, or how is it going to affect your existing relationships with your friends and family?

In the stability condition, the writing prompt was the same except people were asked to write about a job in which they would have to live in one place for ten years instead of one that involves moving every other year. After responding to the task, this sheet was collected and participants received an information set.

Information manipulation. Participants were randomly assigned to receive one of three information sets: descriptions of five novel food combinations (simulation condition), a surrogate's ratings of the five foods (surrogation condition), or both (both condition). The descriptions of the foods were simply the names of the five unfamiliar food combinations: plain yogurt and cheese, almonds and strawberry jam, walnuts mixed with hot sauce, apple slice with onion, and kiwi with drops of hot sauce. I chose these five foods because they were identified in
a pilot test as likely to be subject to affective forecasting error and also to be unfamiliar (i.e., not usually eaten) to people in general (Lee & Wilson, 2011). In the simulation condition participants received a sheet with a list of the descriptions of each food (Appendix B), copied these descriptions on a rating sheet (see Appendix C), and rated how much he or she would enjoy each food. Participants copied these descriptions by matching the letter next to each food description (A through E) with the letters on the ratings sheet. These letters were in a random order. In this way, people copied the foods down on their ratings sheets in a random order. This was to prevent order effects. Then participants rated how much they would enjoy each food.

In the surrogation condition the index cards were labeled Food A through Food E with no description of what the food was. Instead, each card indicated how a previous participant had enjoyed each food. These surrogates were selected from a pool of 32 participants from the same population who previously tasted the foods and rated their enjoyment of them (Lee & Wilson, 2011). I chose 16 surrogates whose average ratings of the five foods were nearly identical to the original 32 surrogates' average ratings. I matched surrogates across the conditions that received surrogation information (i.e., people in the surrogation and both conditions received the same set of surrogates); Table 1 lists the means and standard deviations of the 16 surrogate's ratings of the five foods. The same procedure was followed: participants copied down the each rating onto a ratings sheet (Appendix C), matching the letters of the food with the letters on the ratings sheets and then copying down the rating next to the letter. Again, these letters were in a random order. Participants then rated how much they would enjoy each food.

Participants in the both condition received the descriptions of the foods and the surrogates’ ratings in counterbalanced order. For half of the participants the simulation
information appeared first, and for the other half surrogation information appeared first on their information sheet (see Appendix B).

**Dependent measures.** Participants rated how much they would enjoy each food on a 7-point Likert scale ranging from *not at all* (1) to *very much* (7) (See Appendix C). Participants then completed an additional questionnaire (Appendix D) that included demographic information, including questions about participants’ race and history of residential movement.

**Manipulation check.** Finally, after the debriefing, I administered a post-experiment questionnaire (Appendix E) to check participants' knowledge of the information they received as well as their understanding of the instructions. The first question listed “Description of foods” and “Randomly chosen UVA student's ratings” and asked participants to circle which one(s) they had received. The second question asked participants who reported that they had received another student's ratings whether they believed that these ratings had been experience ratings or forecast ratings.

**Results**

I removed and replaced three participants due to experimenter error. Initial analyses revealed that there were no main or interaction effects of gender, race, or residential mobility history on forecasts. Therefore, I collapsed across these variables on all subsequent analyses.

Results of the manipulation check were mixed. Twelve out of 96 people failed to note accurately which types of information they had received: eight were from the both condition, one was from the simulation, and three were from the surrogation condition. Fifteen people failed to recognize that the surrogate information reflected another person's experience, as opposed to another person’s forecast rating; seven were from the both condition, six from the surrogation, and two in the simulation conditions. In all, 20 people failed either or both manipulation check
questions. In retrospect, I believe that these high numbers were due at least in part to the confusing nature of the questions. People were not explicitly asked to circle more than one type of information, for example, which may have confused some participants in the both condition. Further, once people in the both condition failed to note that they received surrogation information, they neglected to then answer the second question, which was whether the surrogation information was someone else's experience or their forecasts. I therefore decided to include all participants in subsequent analyses.

I combined participants' forecasts of their enjoyment of the five foods into a composite forecast. This was done by first reverse-coding participants' forecasts for "Plain yogurt and cheese." This was done because previous pilot data revealed that this was the only food item where participants overestimated their enjoyment (participants tend to underestimate enjoyment of the other four foods; Lee & Wilson, 2011). By reverse-coding predictions for yogurt and cheese and averaging these scores with predictions for the other four foods, I thus created an overall prediction index on the same metric, such that the closer the mean rating is to the mean of the surrogates’ ratings of the foods (M=4.14, SD=.85) presumably the more accurate participants’ forecasts were. The means and standard deviations of the five individual food combinations are shown in Table 2.

Participant’s composite forecasts were affected by what type of information they received. I performed a 3 (Information Received: simulation, surrogation, both) x 2 (Mobility Condition: mobile vs. stable) analysis of variance (ANOVA), which revealed a significant main effect of Information Received, $F(2, 90) = 12.16, p < .001, \eta^2_p = .21$. As seen in Figure 1, the mean in the surrogation condition (M=3.75, SD=.97) was higher than the mean in the simulation condition (M=2.96, SD=.89), and closer to the mean of the surrogates’ ratings. This finding is
consistent with previous results indicating that receiving surrogation information leads to more accurate forecasts than receiving simulation information (Gilbert et al., 2009). Also replicating previous research, the mean in the both condition \( M = 3.21, SD = .71 \) fell in between the simulation and surrogation conditions (Walsh & Ayton, 2009). Post hoc comparisons using Fisher's Least Significant Difference tests revealed significant differences between the simulation and surrogation conditions \( p < .001 \), the simulation and both conditions \( p = .02 \), and the surrogation and both conditions \( p = .01 \). These results confirm Hypothesis 1: People who received surrogation information appear to have made the most accurate forecasts, followed by people who received both and simulation information, respectively.

I predicted that the mobility prime would not make a difference in the simulation and surrogation conditions (Hypothesis 2), but that in the both condition, people primed for mobility would use the surrogation information more than people primed for stability would. As seen in Table 3 and Figure 2, I found some support for this prediction. In the simulation and surrogation conditions, the difference in predictions between the mobility and stability prime conditions was nonsignificant, \( t(90) = -1.08, t(90) = -10, p > .10 \), respectively, confirming Hypothesis 2. Consistent with Hypothesis 3, participants in the mobile condition had higher scores on the prediction index than did participants in the stable condition, a difference that was marginally significant, \( t(96) = 1.91, p = .06 \).

As predicted, then, the data suggest that people primed in the mobility condition were more likely to index the surrogate's experience when making their own predictions about how enjoyable the foods would taste. This conclusion must be tempered, however, by the fact that the Mobility x Information Received interaction was not significant, \( F(2, 90) = .81, p = .45, \eta_p^2 = .02 \). (There was a marginally significant main effect of Mobility, \( F(1, 90) = 3.17, p = .08, \eta_p^2 = .03 \).)
Excluding the people that failed the manipulation checks resulted in similar results. Excluding people who failed either or both questions of the manipulation check led to similar significance values in the Information Received main effect, \( F(2, 90)=8.96, p=.001, \eta_p^2 = .21 \), Mobility main effect, \( F(1, 90)=3.44, p=.07, \eta_p^2 = .05 \), still marginally significant; and the Interaction effect, \( F(2, 90)=1.33, p=.27, \eta_p^2 = .04 \).

**Discussion**

In the current study, I hypothesized that: (1) regardless of mobility condition, people in the surrogation condition would make forecasts most similar to the surrogate's original ratings followed by those in the both condition and finally those in the simulation condition; (2) the mobility prime would not make a difference in the simulation and surrogation conditions as the people in these conditions only receive one piece of information to use; and (3) priming for mobility would make a difference in the both condition such that people primed for mobility would make forecasts similar to the surrogate's original ratings more so than people primed for stability, who would possibly discount the surrogation information and instead rely primarily on the simulation information.

Consistent with my first hypothesis, regardless of mobility, people who received surrogation information made forecasts closest to the original surrogates' ratings, followed by people who received both types of information, and finally people who received only simulation information. Because people in the both condition had access to the simulation information, they were able to engage in faulty mental simulation, which affected their use of the surrogate's ratings when forecasting. These people therefore adjusted more from the surrogate's ratings.

This result replicates previous studies (Gilbert et al., 2009; Walsh & Ayton, 2009). Walsh & Ayton's study showed that people in the both condition tended to make forecasts in between
the surrogation and simulation information conditions. I replicated this study but used different stimuli (i.e., tasting novel food combinations instead of getting a chronic disease), demonstrating that the original finding can be generalized to other areas of life, including one as small as food choice.

Consistent with Hypothesis 2, priming mobility did not lead to significant differences in the simulation and surrogation conditions. Finally, I found tentative support for Hypothesis 3. On the negative side, the interaction between information given and mobility prime did not approach significance. However, there was a significant difference between mobility conditions within the both condition. Participants who were primed for mobility made composite forecasts closest to the surrogates' average rating, or in other words made composite forecasts that resembled the forecasts of those in the surrogation condition. Those who were primed for stability had composite forecasts that resembled those of the simulation condition. This is to say, people primed for mobility were more likely to use the surrogation information when forecasting while those primed for mobility were more likely to be affected by the simulation information.

These findings are surprising because they seemingly contrast with previous findings that have associated residential mobility with independence and residential stability with collectivism (see Oishi, 2010 for reviews). Independent people tend to value uniqueness, while collectivistic people tend to value harmony (Kim & Markus, 1999). Based on this literature, I might have predicted the opposite: that priming for mobility would lead participants to rely more on simulation information in the both condition, while priming for stability would lead people to rely more on surrogation information.

However, I can explain these findings in two ways. First, previous research has found that people in the psychological state of mobility become anxious about moving and then
ironically turn to uniform chain stores, and familiar objects and faces, seemingly decreasing their uniqueness (Oishi et al., 2012). In my study, the surrogate was introduced to participants as a "randomly chosen UVA student". As the participants were all UVA students, this random UVA student may have served as the familiar face for those primed with mobility, leading them to use the surrogation information more in the both condition. This explanation complements other advice research which found that anxious people tend to ask for advice more and also tend to take this advice (Gino et al., 2012).

Also, previous research has found that people primed with stability tended to exhibit signs of xenophobia when a member of their team was unlikeable (Oishi et al., 2007). As well, mobile people tended to prefer egalitarian helpers, while stable people tended to prefer loyal helpers (Lun et al., 2012). This again suggests that stability is associated with xenophobia, or distrust of strangers, associated with a strong distinction of in-group versus out-group as in collectivism, while mobility is associated with open, duty-free friendships, and low in-group out-group distinction as in individualism (Oishi, 2010). Also people who are mobile or are primed for mobility have a tendency to prefer egalitarian helpers because they either remember or anticipate being a stranger themselves. Essentially then mobility evokes a tendency to trust others. In my study the surrogate was essentially a stranger and therefore the people primed for stability may have distrusted this stranger's ratings, instead using the simulation information. On the contrary, the people primed with mobility would have trusted the stranger and therefore used the surrogate's ratings when making their forecasts.

These explanations for the difference found between mobility conditions within the both condition are all possible interpretations of this result. However, as this study was exploratory, there is no way of knowing exactly which of these explanations is correct, or even if all of these
are correct. Future research should therefore examine possible mediators of the relationship between mobility and advice seeking and taking tendencies as a better way to explain the difference found here. For example, future studies should look at anxiety as a possible mediator. Future studies could also look at whether priming people with stability evokes a tendency to distrust the surrogate because they view the surrogate as a stranger and a member of an out-group. Moreover, the current study focused on a very specific area of advice, correcting affective forecasting error. It would be interesting to see if these findings could be replicated with other areas, such as correcting people's answers to factual type questions (e.g., "What year was the Suez Canal opened?;" Yaniv, 2004). Finally, it may help to include a control condition in the future. This would reveal exactly how different the forecasts between the mobility and stability conditions are in comparison to a control condition.

Our study found that a mindset such as focusing on residential mobility affects correcting affective misforecasting with a surrogate's experience, contributing to a new area of research that is yet to be explored in depth. However, there were a number of limitations that could be corrected in future studies. The primary criticism of Walsh and Ayton's surrogation study (2009) was that participants only forecasted but did not experience the event, so they could not necessarily conclude that the people who used the surrogate's ratings and made forecasts similar to the original surrogates would actually have reduced their affective forecasting error. Of course, people could not have possibly been forced to experience what it would be like to have a chronic disease. However, in my study, I actually could have asked participants to then experience the foods by eating them after their forecasts, and then have them rate how much they liked the foods. Future studies could possibly include this step so that it is clear that people who made forecasts closest to the original surrogate's ratings would be more accurate.
Another limitation to my study was that my dependent variable, how much people would enjoy the food, was slightly difficult to interpret. By relying on a Likert scale, this opened up the possibility that participants who only received the surrogation information would not know what to do it, and just randomly guess numbers when forecasting. This type of response pattern would also produce similar results, as the averages of people in the surrogation information condition regardless of mobility tended to fall in the middle of the scale. I could not know for sure therefore that people actually understood the surrogation information and used it versus just guessing numbers randomly because they did not understand. Future studies could instead give participants the surrogate's ratings of the foods, but then have them choose between two foods the one that they think will taste the best. That way I could reduce some random guessing and people could effectively use surrogation information to make a decision--a choice between two different foods.

Finally, I had a major issue with my manipulation check, with a large number of people failing either both or one of the main questions. If I exclude these people, though, the significance levels for all of the effects were about the same. However it was difficult to not include these people as they made up a large portion of my sample. As well, my manipulation check was slightly ambiguous. The first question, what type(s) of information did you receive, was one that asked people who received both simulation and surrogation information to circle both of these instead of offering this as a choice in itself. This may have led people to seemingly forget to circle both information choices, as it is a strange request. Therefore, I did not know what to conclude if people missed this question. Before people made their forecasts, they were asked to first transcribe the information they were going to use onto their own ratings sheet. There was no way then that they would be able to ignore or not read a certain type of information
before forecasting. Therefore, people's failure to answer question one of the manipulation check correctly may just reflect a retrieval error or a general confusion with the question, but they certainly had to have read the information before forecasting. Therefore I can conclude tentatively that failing this manipulation check question did not mean that participants failed to notice or read the information they received.

What does need to be reexamined is the second manipulation check question: whether people believed that the surrogate's ratings were their actual experience of the foods or just another person's forecasts as well. Though the experimenter tried to emphasize that the ratings from the surrogate were actual experience ratings when explaining the instructions to the participants, a significant number of people still failed that check question. If people did not think that the surrogate actually had eaten the foods, but instead were reporting how much they would have liked to eaten the foods, this may have increased people's discounting of the surrogate. Even if people used the surrogate's ratings to make their forecasts, it makes it difficult to distinguish between participants' motivations. If participants believed that the surrogate's ratings were their forecasting ratings, a decision to use that information to forecast could reflect desires to fit in with the group or beliefs that other people's tastes are similar to their own, while it also makes a decision to discount that information when forecasting very justified. Whereas if participants believed that the surrogate's ratings were experience ratings, people have more of a reason to use that information to make forecasts instead of discounting them, and also a usage of the information to forecast would reflect people's belief that someone else's experience is accurate. However, a majority of people did get the manipulation check correct, and that either way, the surrogate's ratings count as a form of advice; even if people believed that these only reflected another person's tastes, they could still use them when making their forecasts. Future
studies, however, should emphasize that the surrogation information is another person's experience, and employ a more stringent manipulation check policy (i.e., throwing out and replacing people that thought that the surrogate's ratings were their forecasts).

Currently I am in the process of data collection for a second online study using Amazon's Mechanical Turk. I have a larger, more representative sample as well as a more stringent manipulation check. This time my manipulation check questions are clearer. Finally, participants are asked to choose between eating two foods instead of rating how much they would enjoy a food on a rating scale.

Affective forecasts play a large role in various areas of decision making. People use their predicted emotional reactions to anticipate the outcomes and consequences of their decisions. A person who is making even an everyday decision such as where to go to lunch or what to get for lunch may rely on simulating how much they would enjoy eating a certain food in a certain restaurant to make his or her decision. However people tend to be inaccurate at these predictions, which may lead to poor decision making. A person who believes that the special that they usually get at their favorite restaurant is the most enjoyable ignores the new dishes but may actually be missing out. I have shown that taking advice, or more specifically, another person's experience of an event is an effective way of reducing the systematic errors people commit when forecasting. I have also shown that when people are exposed to both a description of an event and someone else's experience of it as in everyday life, they tend to discount someone else's experience more so than if only given someone else's experience. Finally, I have found that an individual factor such as a person's residential mobility makes a difference in terms of how much people use surrogation information when they receive both types of information.
When making decisions about whether they should experience a certain movie, restaurant, or musician, people often index others' opinions or turn to websites such asrottentomatoes.com, yelp.com, or pitchfork.com for other people's experiences and reviews. My findings suggest that this is beneficial, not only because it aids people in making accurate forecasts, but also because these may provide comfort in an increasingly mobile world where people often find themselves to be strangers in new places. It would be interesting therefore to examine these real cultural phenomena (e.g., reviews websites such as rottentomatoes, or advice or review columns in newspapers) and compare how popular they are in mobile versus stable areas. Furthermore, this research could be expanded to look at people's specific residential mobility history and advice taking tendencies. These areas of future research would provide a stronger foundation for concluding that mobility does play a role not only in decision making, but in the strategies people use when forecasting how much they will enjoy a certain movie, play, song, or restaurant, as this study has only scratched the surface.
References


Appendix A

Residential Mobility Prime

Please take the next 5 minutes to put yourself in the following situation and write down as much as possible about it.

Imagine that you are offered a job that you have always wanted. The job also involves moving to a different location every other year. Please use the space below to describe in as much detail as possible what it would be like for you to have such a lifestyle. What will it be like to live in a different place every other year? What is good and bad about it? How do you think it will affect your relationships with other people? For example, what kind of friends will you have, or how is it going to affect your existing relationships with your friends and family?

Residential Stability Prime

Please take the next 5 minutes to put yourself in the following situation and write down as much as possible about it.

Imagine that you are offered a job that you have always wanted. The job also involves living in one area for at least the next 10 years. Please use the space below to describe in as much detail as possible what it would be like for you to have such a lifestyle. What will it be like to live in one place for 10 years? What is good and bad about it? How do you think it will affect your relationships with other people. For example, what kind of friends will you have, or how is it going to affect your existing relationships with your friends and family?
Appendix B

Food Combination Descriptions

A Plain Yogurt and Cheese
B Almonds mixed with Strawberry Jam
C Walnuts mixed with Hot Sauce
D Apple Slice with Onion
E Kiwi Slice with drops of Hot Sauce

Surrogation Information Sheet

Part ID#_____

Please rate how much you enjoyed eating each of the five food combinations, using the rating scale below.

1  2  3  4  5  6  7
Not at all  Very much

1. Food combination A ____
2. Food combination B ____
3. Food combination C ____
4. Food combination D ____
5. Food combination E ____
Appendix C

Instructions

In preparation for a larger study of food preferences, I am interested in how much people like unusual combinations of foods. You will be asked to rate how much you would enjoy eating each of five food combinations.

We will provide you with a description of each food combination.

Please turn the page.
Simulation Condition

Ratings Sheet

First, fill in the WHOLE first column: Please look ahead to the next page and find the corresponding Food Combination Description that matches the alphabet letters below and write it below in the first column.

Second, fill in the WHOLE second column: Rate how much you would enjoy each food combination using the rating scale below.

<table>
<thead>
<tr>
<th>Description of Food Combination</th>
<th>Your Enjoyment Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

Rating Scale:

1 | 2 | 3 | 4 | 5 | 6 | 7 |
---|---|---|---|---|---|---|
Not at all | | | | | | Very much
Surrogation Condition

Ratings Sheet

**First, fill in the WHOLE first column:** Please look ahead to the next page to the randomly chosen Other UVA Student's Food Enjoyment Ratings. Find the corresponding randomly chosen Other UVA Student's Food Enjoyment Rating that matches the alphabet letters below and write it below in the first column. These ratings were the UVA student's enjoyment of the foods after actually tasting them.

**Second, fill in the WHOLE second column:** Rate how much you **WOULD enjoy** each food combination using the rating scale below.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>

Other UVA Student's Actual Enjoyment Ratings

<table>
<thead>
<tr>
<th>B</th>
<th></th>
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<tbody>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>
Both Condition

Ratings Sheet

First, fill in the WHOLE first column: Please look ahead to the next page and find the corresponding Food Combination Description that matches the alphabet letters below and write it below in the first column.

Second, fill in the WHOLE second column: Please look ahead to the next page to the randomly chosen Other UVA Student’s Food Enjoyment Ratings. Find the corresponding randomly chosen Other UVA Student’s Food Enjoyment Rating that matches the letters below and write it below in the second column. These ratings were the UVA student’s enjoyment of the foods after actually tasting them.

Third, fill in the WHOLE third column: Rate how much you WOULD enjoy each food combination using the rating scale below.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description of Food Combination</th>
<th>Other UVA Student’s Actual Enjoyment Ratings</th>
<th>Your Predicted Enjoyment Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
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<td>3</td>
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<td>4</td>
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<tr>
<td>5</td>
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<tr>
<td>6</td>
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</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Very Much</td>
<td></td>
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</tbody>
</table>

Description of Food Combination: B ________________________________  

Other UVA Student’s Actual Enjoyment Ratings: ________  

Your Predicted Enjoyment Ratings: ________

Description of Food Combination: D ________________________________  

Other UVA Student’s Actual Enjoyment Ratings: ________  

Your Predicted Enjoyment Ratings: ________

Description of Food Combination: C ________________________________  

Other UVA Student’s Actual Enjoyment Ratings: ________  

Your Predicted Enjoyment Ratings: ________

Description of Food Combination: A ________________________________  

Other UVA Student’s Actual Enjoyment Ratings: ________  

Your Predicted Enjoyment Ratings: ________

Description of Food Combination: E ________________________________  

Other UVA Student’s Actual Enjoyment Ratings: ________  

Your Predicted Enjoyment Ratings: ________
Both Condition (counterbalanced)

Ratings Sheet

First, fill in the WHOLE first column: Please look ahead to the next page to the randomly chosen Other UVA Student's Food Enjoyment Ratings. Find the corresponding randomly chosen Other UVA Student's Food Enjoyment Rating that matches the alphabet letters below and write it below in the first column. These ratings were the UVA student's enjoyment of the foods after actually tasting them.

Second, fill in the WHOLE second column: Please turn the page to find the corresponding Food Combination Description that matches the letters below and write it below.

Third, fill in the WHOLE third column: Rate how much you WOULD enjoy each food combination using the rating scale below.

<table>
<thead>
<tr>
<th>1</th>
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<th>4</th>
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<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Very Much</td>
<td></td>
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</tbody>
</table>

Other UVA Student's Actual Enjoyment Ratings  Description of Food Combination  Your Predicted Enjoyment Ratings

B  
D  
C  
A  
E  
Appendix D

Additional Questionnaire

1. When making decisions, are you more likely to seek advice or decide for yourself?

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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TEND TO DECIDE FOR MYSELF</td>
<td>TEND TO SEEK ADVICE</td>
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</table>

2. When you are considering eating a novel food, how much would you rely on how other people feel about it?

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<tbody>
<tr>
<td></td>
<td>NOT AT ALL</td>
<td>VERY MUCH</td>
<td></td>
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</table>

3. When making decisions, are people around you likely to rely on your advice?

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<th>7</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>DO NOT TEND TO RELY ON YOUR ADVICE</td>
<td>TEND TO RELY ON YOUR ADVICE</td>
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</table>

4. When making decisions, are your friends likely to rely on your advice?

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<th>4</th>
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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DO NOT TEND TO RELY ON YOUR ADVICE</td>
<td>TEND TO RELY ON YOUR ADVICE</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

5. When making decisions, is your family likely to rely on your advice?

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DO NOT TEND TO RELY ON YOUR ADVICE</td>
<td>TEND TO RELY ON YOUR ADVICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

6. When making a decision, if you want to know what the average opinion of other people is, how many people’s opinion would you ask? ( ) people

7. In general, there is cultural pressure to follow an average opinion.
8. When you are considering eating a novel food, if you want to know the average opinion of it is, how many people’s opinion would you ask? ( ) people

9. In general, there is cultural pressure to follow an average opinion about food taste.

We are interested in how people respond when they are confronted with difficult or stressful events in their lives. There are lots of ways to deal with stress. Please indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Please indicate how much you use the following stress coping strategies when faced with a challenge:

1. I ask people who have had similar experiences what they did. ( )
2. I try to get advice from someone about what to do. ( )
3. I talk to someone to find out more about the situation. ( )
4. I talk to someone who could do something concrete about the problem. ( )
5. I talk to someone about how I feel. ( )
6. I try to get emotional support from friends or relatives. ( )
7. I discuss my feelings with someone. ( )
8. I get sympathy and understanding from someone. ( )

Please estimate an answer to the following questions:

When did the second explorer, after Columbus, land in the West Indies?

What is the boiling point of water on Mt. Everest?

Please indicate the degree to which each word describes who you are in general using the 5 point scale below.

<table>
<thead>
<tr>
<th></th>
<th>Not at all True</th>
<th>Mostly not True</th>
<th>Neither True nor Untrue</th>
<th>Mostly True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Imaginative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Organized</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Talkative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sympathetic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tense</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Intelligent</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Thorough</td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>Assertive</td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>Kind</td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>Anxious</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>11</td>
<td>Original</td>
<td></td>
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</tr>
<tr>
<td>12</td>
<td>Efficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Active</td>
<td></td>
<td></td>
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<tr>
<td>14</td>
<td>Soft-hearted</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>15</td>
<td>Nervous</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>16</td>
<td>Insightful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Responsible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Energetic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
19. Warm (   )
20. Worrying (   )
21. Clever (   )
22. Practical (   )
23. Outgoing (   )
24. Generous (   )
25. Self-pitying (   )

Below are some personal statements that you may agree or disagree with. Please indicate the response that best fits you, using the 7-point scale below.

1 2 3 4 5 6 7

Strongly Disagree Slightly Neither Agree Slightly Agree Strongly Disagree Disagree nor Disagree Agree Agree

1. _____In most ways my life is close to my ideal.
2. _____The conditions of my life are excellent.
3. _____I am satisfied with my life.
4. _____So far I have gotten the important things I want in life.
5. _____If I could live my life over, I would change almost nothing.
1. Please write any thoughts you had during the study.

2. During the study, what did you think the purpose of this study was? Now what do you think the purpose of the study is?

1. What is your gender? (circle one) male  female

2. How old are you? _____

3. Birth Place: ________________________(City/Town) ________(State) ________(country)

4. Where have you lived?
   ________________________(City/Town) ________(State) ________(country) Your age while there ___ to ___ years old
   ________________________(City/Town) ________(State) ____ (country) Your age while there ___ to ___ years old
   ________________________(City/Town) ________(State) ____ (country) Your age while there ___ to ___ years old
5. In total, how many times did you move before entering college? ______
6. Of the moves, how many of them involved inter-state or international moves? ______
7. How many times are you planning to move in the next few years? ______

8. Please indicate any racial/ethnic categories which describe you. Select as many as needed.

( ) Caucasian/White

( ) African American/Black

( ) Hispanic or Latino

( ) Asian

( ) Middle Eastern

( ) Native Hawaiian or Other Pacific Islander
Appendix E

**Post experiment Questionnaire**

Which information did you receive? (Circle one or more below)

- Description of foods
- Randomly chosen UVA student's ratings

If you circled the randomly chosen UVA student's ratings, what did you think these were DURING the second task? (Circle one)

- Prediction ratings (where they predicted how they felt about a food)
- Experience ratings (where they actually tasted the foods and then rated them before this study)
- Neither (I was really confused)

Were you able to follow the directions? Did you fill in the first column before proceeding to the second? (Circle) Yes No

Comments about the directions?

How did you make your predictions about the foods based on the information?
<table>
<thead>
<tr>
<th>Surrogates</th>
<th>Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Yogurt and Cheese</td>
<td>2.31</td>
<td>(1.45)</td>
</tr>
<tr>
<td>Almonds and Strawberry Jam</td>
<td>5.38</td>
<td>(1.26)</td>
</tr>
<tr>
<td>Walnuts and Hot Sauce</td>
<td>3.00</td>
<td>(1.16)</td>
</tr>
<tr>
<td>Apple Slice with Onion</td>
<td>3.87</td>
<td>(1.41)</td>
</tr>
<tr>
<td>Kiwi with Drops of Hot Sauce</td>
<td>2.75</td>
<td>(1.73)</td>
</tr>
<tr>
<td>Average Surrogate Rating</td>
<td>4.14</td>
<td>(.85)</td>
</tr>
</tbody>
</table>

Notes: The numbers in each cell indicate mean and (standard deviation) of surrogate's enjoyment of the foods. Enjoyment was measured by a Likert scale with scores ranging from (1) not at all to (7) very much. Average surrogate rating refers to the average of all of the surrogate's ratings across foods.
Table 2.

_Means and standard deviations of forecasts of the original five food combinations_

<table>
<thead>
<tr>
<th>Information Received</th>
<th>Simulation</th>
<th>Surrogation</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plain Yogurt and Cheese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>3.62 (2.13)</td>
<td>2.69 (1.49)</td>
<td>2.75 (1.29)</td>
</tr>
<tr>
<td>Stable</td>
<td>3.44 (1.75)</td>
<td>2.56 (1.50)</td>
<td>3.19 (1.38)</td>
</tr>
<tr>
<td>Almonds and Strawberry Jam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>4.88 (1.26)</td>
<td>5.06 (1.24)</td>
<td>5.09 (1.08)</td>
</tr>
<tr>
<td>Stable</td>
<td>3.81 (1.80)</td>
<td>4.94 (1.12)</td>
<td>4.81 (1.56)</td>
</tr>
<tr>
<td>Walnuts with Hot Sauce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>2.25 (1.29)</td>
<td>3.06 (1.12)</td>
<td>2.87 (1.63)</td>
</tr>
<tr>
<td>Stable</td>
<td>2.00 (1.16)</td>
<td>3.63 (1.26)</td>
<td>2.94 (1.24)</td>
</tr>
<tr>
<td>Apple Slice with Onion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>2.19 (1.17)</td>
<td>3.88 (1.41)</td>
<td>3.15 (1.75)</td>
</tr>
<tr>
<td>Stable</td>
<td>2.38 (1.54)</td>
<td>3.50 (1.51)</td>
<td>1.88 (1.89)</td>
</tr>
<tr>
<td>Kiwi with Hot Sauce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>2.12 (1.54)</td>
<td>3.06 (1.53)</td>
<td>2.06 (1.00)</td>
</tr>
<tr>
<td>Stable</td>
<td>1.94 (1.34)</td>
<td>2.88 (1.78)</td>
<td>2.06 (1.29)</td>
</tr>
</tbody>
</table>

_Notes. _Forecasts were measured as the predicted enjoyment of the food combination, measured on a 7-point Likert scale, with higher ratings indicating more enjoyment._
Table 3

*Means and standard deviations of composite forecast (mean average of predicted enjoyment ratings of five food combinations)*

<table>
<thead>
<tr>
<th>Information Received</th>
<th>Simulation</th>
<th>Surrogation</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile</td>
<td>2.86 (1.04)</td>
<td>3.77 (.97)</td>
<td>3.50 (.64)</td>
</tr>
<tr>
<td>Stable</td>
<td>2.53 (.71)</td>
<td>3.73 (1.01)</td>
<td>2.92 (.68)</td>
</tr>
</tbody>
</table>

*Notes.* Forecasts were measured as the predicted enjoyment of the food combination, measured on a 7-point Likert scale, with higher ratings indicating more enjoyment. The composite forecast is the mean average of the forecasts of all five food items.
Figure Captions

*Figure 1.* Composite forecast (in future enjoyment ratings measured by 7-point Likert scale, enjoyment) for Simulation, Surrogation, and Both information conditions (totaled across mobility conditions). Error bars denote one standard error around the mean. Line denotes surrogates' average experience rating for comparison.

*Figure 2.* Composite forecasts (in future enjoyment ratings measured by Likert scale) for Mobile and Stable mobility conditions grouped by Simulation, Surrogation, and Both information conditions. Error bars denote one standard error around the mean. Line denotes surrogates' average experience rating for comparison.
MOBILITY AND ADVICE

1. Simulation
2. Surrogation
3. Both

Surrogates' avg. experience

Composite Forecast (enjoyment)
Simulation

Surrogation

Information Received

Both

Composite Forecasts of Enjoyment

Surrogates’ avg. experience

Mobile

Stable