Short Article

Older but not wiser—Predicting a partner's preferences gets worse with age

Benjamin Scheibehenne [a,b,*], Jutta Mata [b,c], Peter M. Todd [b,d]

[a] University of Basel – Economic Psychology, Missionsstrasse 62a, 4055 Basel, Switzerland
[b] Max Planck Institute for Human Development, Center for Adaptive Behavior and Cognition, Lentzeallee 94, 14195 Berlin, Germany
[c] Department of Psychology, Stanford University, Bldg. 420, 450 Serra Mall, Stanford, CA 94305, USA
[d] Indiana University, Cognitive Science Program, 1101 E. 10th St., Bloomington, IN 47405, USA

Abstract

To test the influence of relationship length on ability to predict a partner's preferences, 58 younger ($M=24.1$ years) and 20 older ($M=68.7$ years) couples made predictions in three domains that varied in daily importance. While prediction accuracy was generally better than chance, longer relationship length correlated with lower prediction accuracy and greater overconfidence. The difference in accuracy between older and younger couples increased for strong preferences and when controlling for preference reliability over time. Independent of relationship length, prediction accuracy was higher for important domains, for strong, reliable, and stereotypical preferences, and when couples were more similar.
© 2010 Society for Consumer Psychology. Published by Elsevier Inc. All rights reserved.

Keywords: Preference prediction; Age differences; Food choice; Overconfidence; Preference reliability

Predicting the likes and dislikes of others is a well-known challenge. Even for close relatives and friends we often do not know exactly what to recommend to them at a restaurant, or what gifts to get them to make them happy. This is despite the fact that we have a variety of occasions in everyday life in which we have to predict the preferences of others around us, especially for our romantic partners. Examples include important medical decisions (Fagerlin, Ditto, Danks, Houts, & Smucker, 2001), but also daily choices such as what to make for dinner (Wansink, 2006). Do we get better at making these predictions over time, as our experience with particular individuals and their tastes increase?

Past research on preference prediction reported varying degrees of accuracy among people depending on their closeness (Lerouge & Warlop, 2006). For predicting attitudes, interests, and purchase behaviors, Hoch (1987) found correlations between predicted and actual preferences of $r=.08$ for predicting the average American consumer and $r=.51$ for predicting one's own spouse. Preferences for activities such as room cleaning, going to a bar, or playing board games were slightly higher for couples, $r=.57$, than for college roommates, $r=.44$ (Swann & Gill, 1997). For spouses predicting each other's preferences for new product concepts, one study found $r=.27$ (Davis, Hoch, & Ragsdale, 1986).

Following Funder's (1995) emphasis on the variables that moderate prediction accuracy, in this paper we test a number of hypotheses for why some people are better at predicting their respective partners than others. Our main focus is on the influence of relationship length by comparing older and younger couples. We further test the importance of the prediction domain and additional factors that are likely to moderate prediction accuracy but have not received much systematic assessment in past research, including the strength, similarity, and reliability of personal preferences, and relationship quality. We first derive specific hypotheses for each of these factors and then present two studies that aim to test these hypotheses on empirical grounds.

Old and young couples

Dating partners, friends, and family members have been found to make better judgments for each other than for strangers or the general public (Funder & Colvin, 1988; Mata,

* Corresponding author. University of Basel – Economic Psychology, Missionsstrasse 62a, 4055 Basel, Switzerland.
E-mail address: benjamin.scheibehenne@unibas.ch (B. Scheibehenne).

Scheibehenne, & Todd, 2008; Thomas & Fletcher, 2003). Given that judges benefit from even small amounts of feedback (West, 1996), more opportunities for getting feedback about each other's likes and dislikes over the course of a relationship should lead to better predictions. Therefore, at first glance, it seems plausible to predict that older couples (=longer relationship length) should make more accurate predictions than younger couples (=shorter relationship length).

However, as pointed out by Kenny and Acitelli (2001), there are several reasons why more extensive relationship length may not necessarily increase accuracy but lead to a decrease in prediction accuracy instead. First, past research found that most of the increase in accuracy occurs very early during the acquaintance when people are motivated to get to know each other (Ambady & Rosenthal, 1992). Second, especially within long relationships, the motivation to maintain a strictly objective view about the partner might compete with the goal of maintaining a positive relationship. To meet this second goal, people may tend to view their partners as more ideal (Murray, Holmes, & Griffin, 1996) or more similar to themselves (Schul & Vinokur, 2000), which will impair their ability to make objective predictions. Third, to maintain a positive relationship, partners sometimes also give false feedback or tell "white lies" which would further dilute the accuracy of their partner's knowledge over time (Davis et al., 1986). Finally, to the degree that couples who have been together for a long time view their relationship as committed and think they already know each other well, they will be confident in their present knowledge and as a consequence pay less attention to preference changes than will couples who have only been together for a short time (Kenny & DePaulo, 1993). In this case, prediction accuracy will decrease to the extent that preferences change over the course of the relationship.

Past research found that accuracy among student couples who predicted each other's attitudes and activity preferences did not increase with relationship length (Swann & Gill, 1997). However, the relatively short relationship length of student couples is likely insufficient to reliably detect gradual changes over time (Biesanz, West, & Millevoi, 2007). We hypothesize that preference prediction accuracy in older romantic couples with a relatively long relationship duration will be worse than in younger romantic couples with a relatively short relationship duration (H1). Furthermore, following the reasoning of Kenny and DePaulo (1993), we hypothesize that older couples will be more overconfident in their ability to predict their partner's preferences due to their longer relationship (H2).

Prediction domains

When judging each other's personalities, couples have been found to be more accurate for traits that were relevant for their relationship than for traits that bore little relevance (Gill & Swann, 2004). Presumably, this so-called *pragmatic accuracy* occurs because the incentives to "get it right" are higher for important aspects. If so, this effect should also generalize to preference predictions, such that accuracy increases for important domains that are of daily relevance. In the case of preferences, this effect may even be amplified because more

important preferences are probably also more likely to be communicated. To the degree that domains are important because of their daily relevance, they also provide more opportunities for repeated observation, attempted prediction, feedback, and learning (Wood & Neal, 2009). Thus, it can be hypothesized that prediction accuracy will be higher for domains that are important and of daily relevance, such as food, in contrast to domains that are abstract or rare in daily life, such as furniture style preferences (H3).

Similarity

As outlined above, couples have been found to see each other as more similar than they really are, a tendency referred to as egocentric or projection bias (Ross, Greene, & House, 1977). However, simply relying on one's own likes and dislikes when predicting the preferences of one's partner can still prove adaptive: The more similar couples actually are, the more appropriate it will be for them to rely on their own preferences when making predictions. People have been found to successfully use this "projection" strategy when predicting close friends or family members (Davis et al., 1986; Hoch, 1988; Neyer, Banse, & Asendorpf, 1999) and they may adjust their use of projection if they receive appropriate feedback (West, 1996). This could explain the positive relationship between prediction accuracy and couples' similarity reported in earlier studies (Lerouge & Warlop, 2006). Therefore, we hypothesize that prediction accuracy increases with similarity (H4a).

Common sense suggests that couples may also become more similar over the course of their relationship because they share a common environment. However, past empirical research indicates that couples' similarity mainly stems from assortative mating and usually does not increase over time (Feng & Baker, 1994; Glicksohn & Golan, 2001; Rozin, Riklis, & Margolis, 2004). Consequently, older couples will not benefit from being more similar when making predictions. However, following common sense beliefs, they might nevertheless assume that they are very similar (Schul & Vinokur, 2000), leading not only to greater overconfidence but also to a decrease in prediction accuracy due to using too much projection (H4b).

Preference strength

We further hypothesize that a target individual's extreme likes and dislikes will be easier to predict than modest ones, because strong preferences may be more openly communicated by targets with an incentive to avoid or promote future encounters. For the same reason, couples have an incentive to know these preferences as this helps maintain a positive relationship. Thus, prediction accuracy for strong preferences should be higher, regardless of relationship length (H5).

Stereotypical preferences

The degree to which a particular item is popular will vary between different target groups, for example when an action

movie is liked by younger adults but disliked by older adults (Oyserman, 2009; Shalowitz, Garrett-Mayer, & Wendler, 2006). If a particular preference is common, the prediction task may become easier because judges can utilize their knowledge of the base rate or stereotypical preferences. As relying on such "stereotype consensus" (Gill & Swann, 2004, p. 409) has been shown to lead to accurate predictions (Davis et al., 1986), we hypothesize that (age- and gender-specific) stereotypical preferences are predicted with higher accuracy within both younger and older couples (H6).

Preference reliability

Preferences that are stable and consistent over time are easier to predict because they depend less on situational factors or random influences acting on the target that are difficult for the judge to perceive and to take into account (Guilford, 1954). Because of this, reliability also increases the diagnosticity of feedback and hence the ability to learn correctly. In general, unreliability adds noise to any measurement and thus attenuates the relationship between any two variables (Spearman, 1904). Thus, it can be hypothesized that reliable preferences are easier to predict compared to unreliable ones (H7a). We further predict that preference reliability enhances the effect of other predictors on accuracy including relationship length (H7b).

Study 1

To empirically test these hypotheses, we asked younger couples (together for a short time) and older couples (together for many years) to predict each other's preferences in three domains varying in their importance for everyday life decisions.

Method

Participants

A total of 58 heterosexual couples participated; 38 younger couples (mean age 24.1 years, range 19–32 years) and 20 older couples (mean age 68.7 years, range 62–78 years). At the time of the experiment, the younger couples had been in their relationship for an average of 2 years and 1 month (SD = 1 year and 10 months) and 39% lived together in the same household. The average relationship length for the older couples was 40 years and 11 months (SD = 10 years and 2 months) and all lived together in the same household.

Items

Participants judged 40 food dishes (high daily relevance domain), 40 movies (medium daily relevance), and 38 kitchenette designs (low daily relevance). Food items were copied from a Web site that offered recipes, movies were randomly sampled from a German Web site that sold DVDs, and kitchens were sampled from online furniture catalogues. Each item was presented one at a time on a computer screen, with a picture, a name, and a short text edited from the respective online descriptions. For movies, this included a summary of the plot, genre, director, and main actors. Kitchens

and foods were described by the materials or ingredients from which they were made. To help ensure that judges could not resort to specific past knowledge of their partner's preferences for particular items, somewhat uncommon items were chosen. For example, food items included dishes like "Canelloni with shrimp stuffing" or "Camembert omelette with chanterelles," and most movies had not been shown in cinemas but were only available on DVD. Domain and item order were randomized between participants.

Prediction task

For each item, participants stated their own preferences and predicted the preferences of their partner; thus, each person was both judge and target. For both tasks, the answer scale ranged from 1 ("don't like it at all") to 4 ("like it very much"), the intermediate scale labels were "somewhat dislike it" (2) and "somewhat like it" (3). Each participant first rated his or her own preferences on all 118 items. Following this, participants estimated how many of their own preferences would exactly match the predictions made for them by their partner. To make this estimation easier, they were informed that 25% of the items could be expected to be predicted correctly just by chance. Next, participants took the role of the judge and predicted their partner's preferences for all items. As a measure of confidence, participants then estimated how many of their predictions within each category would exactly match their partner's preferences.

Assessment of moderators and control variables

Following the prediction task, participants answered how well they think they know their partner on a scale from 1 (do not know her/him at all) to 7 (know her/him very well) on a computerized questionnaire. As a proxy for the subjective importance of the three domains, participants also rated their interest for each of them on a scale from 1 (not at all interested) to 5 (very interested), and indicated how many movies they watched together with their partner in an average week, how often they cooked and ate together, and if they had ever bought a kitchen together. Participants also completed a German translation of the 7-item relationship assessment scale (RAS— Hendrick, 1988; Sander & Böcker, 1993) that measures the relationship quality in romantic couples on a scale from 1 (low satisfaction) to 5 (high satisfaction). Both partners completed the experiment in separate cubicles that prevented communication between them. Each participant received 15 euros ($20) show-up fee.

Results

Influence of relationship length

Participants' mean prediction accuracy across all 118 items, measured as the exact match of their predictions (i.e., values 1–4) with their respective partner's actual preferences, was 40.2% (95% bootstrapped confidence interval, $CI_{95} = 38.9\%–41.6\%$), which is well above the chance level of 25%. The mean accuracy of couples that had been together for a shorter amount of time (younger couples) was 42.2% ($CI_{95} = 40.8\%–43.7\%$), whereas

the accuracy of couples that had been together longer (older couples) was only 36.5% (CI_{95}=34.0%–38.9%). As there is no overlap between the confidence intervals, Hypothesis 1 was supported.

Confidence in one's own prediction accuracy

On average across all items, judges estimated that they had correctly predicted 61.7% (CI_{95}=58.2%–64.4%) of their partner's choices, which is considerably higher than their actual accuracy. Thus, judges had little awareness of how well they actually know their partner, and appeared to be overconfident. This held true for all three prediction domains. Older judges' confidence (M=62.0%, CI_{95}=55.7%–68.1%) was comparable to that of younger judges (M=61.6%, CI_{95}=58.8%–64.3%), but because the actual prediction accuracy for older judges was lower, their level of overconfidence was higher (mean overconfidence difference=7.2%, CI_{95}=0.5%–13.7%). This supports Hypothesis 2. The difference was primarily due to older females who were more confident (M=69.3%, CI_{95}=61.4%–76.1%) than older males (M=55.5%, CI_{95}=46.7%–64.2%), while there was no difference in the actual prediction accuracy between men and women in either age group.

Participants estimated that their partner would accurately predict 63.9% (CI_{95}=61.1%–66.6%) of their own preferences. Here, older participants were less confident in their partner's ability (M=59.2%, CI_{95}=53.2%–65.0%) than were younger participants (M=66.4%, CI_{95}=63.8%–68.9%). These results fit with the assumption that participants tend to idealize their partners.

Domain dependency

Across all participants, the accuracy was highest for foods (M=45.8%, CI_{95}=43.8%–48.0%) followed by movies (M=41.5%, CI_{95}=39.5%–43.5%) and kitchen designs (M=33.1%, CI_{95}=31.2%–34.9%). Participant self-ratings in the questionnaire indicated that they were most interested in the food domain (M=4.0, CI_{95}=3.9–4.2) followed by movies (M=3.8, CI_{95}=3.6–4.0) and kitchens (M=2.6, CI_{95}=2.4–2.8). Together, this supports Hypothesis 3 of pragmatic accuracy depending on domain importance (Fig. 1). As shown in Fig. 1, older couples were consistently worse than younger couples across all three domains; there was no interaction between relationship length and domain importance.

Similarity

On average, participants had identical preferences to their partner for 34.5% of the items (CI_{95}=33.2%–35.8%), but they only matched on 30.5% (CI_{95}=29.9%–31.1%) of the items with other opposite-sex participants in the same age group. The similarity within older couples (M=34.3%, CI_{95}=31.8%–36.7%) was comparable to younger couples (M=34.6%, CI_{95}=33.1%–36.1%), which is in line with prior research showing that preference similarity does not increase over time. In support of Hypothesis 4a, prediction accuracy was much higher for items for which couples shared identical preferences (M=57.4%, CI_{95}=56.0%–58.8%) compared to items where couples had different preferences (M=31.2%, CI_{95}=30.3%–32.2%).
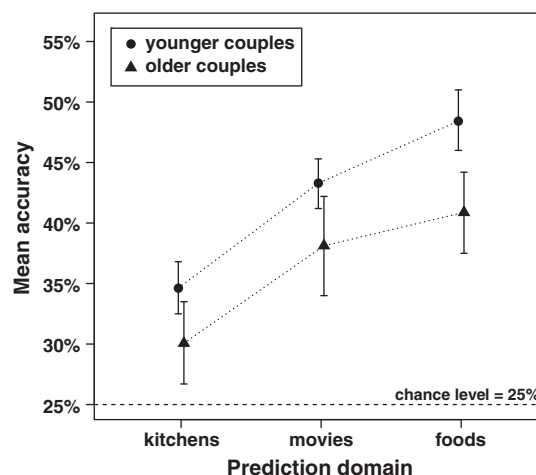

Fig. 1. Prediction accuracy depending on domain and relationship length. Error bars indicate 95% bootstrapped confidence intervals.

Further analyses revealed an interaction between similarity and relationship length: For items for which partners shared preferences, there was no reliable difference in prediction accuracy between older couples (M=56.4%, CI_{95}=54.0%–58.8%) and younger couples (M=57.9%, CI_{95}=56.2%–59.7%)—a mean difference of 1.9% (CI_{95}=−1.4%–4.5%). Yet for items with different preferences the mean difference in prediction accuracy between older couples (M=26.1%, CI_{95}=24.5%–27.6%) and younger couples (M=33.9%, CI_{95}=32.7%–35.1%) increased to 7.8% (CI_{95}=5.9%–9.8%). Next, we will test whether this difference could be due to the fact that older couples rely too much on their own preferences (i.e., use projection too often) when making predictions.

Projection

The use of projection as a prediction strategy would lead to a greater-than-chance overlap between judges' own preferences and their predictions. This can be tested with the data on hand: Across all items, the overlap was higher for older judges (M=50.9%, CI_{95}=49.4%–52.3%) than younger judges (M=44.4%, CI_{95}=43.3%–45.4%), again with chance overlap being 25%. When judges held the same preferences as their target, the overlap did not differ between younger judges (M=57.9%, CI_{95}=56.2%–59.7%) and older judges (M=56.4%, CI_{95}=53.9%–58.8%). However, when judges' preferences were different from their targets, there was still a considerable preference–prediction overlap for older judges (M=48.0%, CI_{95}=46.3%–49.8%) but less so for younger judges (M=37.2%, CI_{95}=36.0%–38.5%). Thus, in line with Hypothesis 4b, a possible explanation for older couples' decrease in prediction accuracy could be that they too often projected their preferences when they were different from the target. Presumably this was the case because the older couples assumed they were more similar than they actually were.

Preference strength

Participants rated 19% of the items as "very much liked" (scale value 4), 31.7% as "somewhat liked" (3), 26.8% as

"somewhat disliked" (2), and 22.5% as "not liked at all" (1). While the overall mean liking score across all items did not differ between younger and older couples, younger targets held a slightly higher percentage of strong ("very much liked" or "not at all liked") preferences ($M = 42.7\%$, $CI_{95} = 41.7\%$–43.7%) compared to older targets ($M = 39.2\%$, $CI_{95} = 37.8\%$–40.6%). Stronger target preferences were more accurately predicted ($M = 43.8\%$, $CI_{95} = 42.5\%$–45.1%) than weaker ("somewhat liked" or "somewhat disliked") preferences ($M = 37.7\%$, $CI_{95} = 36.7\%$–38.8%), confirming Hypothesis 5. When the analysis was limited to only weak preferences, the difference in prediction accuracy between older and younger couples reduced to 2% ($CI_{95} = -0.2\%$–4.2%). Thus, the negative relationship between prediction accuracy and relationship length mainly stemmed from younger couples being better at predicting strong preferences. This relationship held true across all three prediction domains.

Stereotypical predictions

Preference ratings for single items were mostly skewed such that many participants shared the same preferences for a given item, especially so among participants grouped by age or gender. This skew can be quantified based on the entropy of each item's ratings across all participants (Shannon, 1948). Item entropy[1] was negatively correlated with the probability of a correct prediction ($r = -.32$, $CI_{95} = -.47$ to $-.15$), indicating that items for which many people shared the same preference (low entropy) were associated with greater prediction accuracy. This lends support to Hypothesis 6 suggesting that stereotypical preferences are easier to predict.

Predicting the modal (most popular) preference for a given item across all participants would have led to 39.9% ($CI_{95} = 38.9\%$–40.9%) correct predictions. When the modal preference was calculated separately for younger and older targets, this accuracy increased to 40.6% ($CI_{95} = 39.5\%$–41.6%) and 44.1% ($CI_{95} = 42.2\%$–46.0%) respectively, indicating that there is more consensus among older adults. Thus, if anything, this should have made it easier for the older adults to make correct predictions.

Study 2

To test the hypotheses that preference reliability fosters prediction accuracy (H7a) and the (negative) influence of relationship duration on prediction accuracy (H7b), we re-invited all participants for a second session (individually, rather than in couples) 6–8 weeks after the first, in which we re-assessed their preferences for all items. As a measure of reliability, we calculated the difference between the preference ratings at both measurement points for each item. To further explore differences between older and younger couples, we also measured participants' knowledge of modal or stereotypical preferences among their peers.

---

[1] The item entropy e was calculated as the sum across all four possible answers i of the probability p_i of each answer multiplied by its logarithm: $e = \sum p_i \cdot \log_2(p_i)$.

Method

The experimental procedure during this second session was identical to the first session except that participants were not asked to predict the preferences of their respective partner but instead to predict the preferences of an average person of the same sex and age as their partner. These measures were used as proxies for what participants thought were the modal or stereotypical preferences of their cohort. For the second session, 100 participants returned (37 older and 63 younger participants), representing 55 couples in total. Returning participants were similar to those in the first session in terms of age, relationship length, preference strength, and similarity.

Results

Reliability

At the second measurement point the average item reliability, measured in terms of exact preference matches with the responses from the first session, was 53.1% ($CI_{95} = 51.3\%$–54.9%), indicating that participants held stable, reliable preferences for about half the items on average. This is comparable to reliability measures found in previous studies (Mata et al., 2008). Couples (in Study 1) correctly predicted 45.5% ($CI_{95} = 44.2\%$–46.7%) of these reliable preferences for each other but only 34.0% ($CI_{95} = 32.7\%$–35.2%) of the unreliable ones, lending support for Hypothesis 7a. Furthermore, younger couples' preferences were more reliable ($M = 55.0\%$, $CI_{95} = 53.3\%$–56.6%) than those of older couples ($M = 49.9\%$, $CI_{95} = 46.8\%$–52.9%). However, the loss in prediction accuracy for older couples does not stem from having less reliable preferences because, when only reliable items are analyzed, the difference in prediction accuracy between young and old couples *increases* to 8.9% ($CI_{95} = 6.4\%$–11.5%). This interaction supports Hypothesis 7b.

Reliability also strengthens the effect of prediction domain reported earlier: The accuracy for reliable food items ($M = 50.2\%$, $CI_{95} = 47.1\%$–53.4%) and movies ($M = 45.8\%$, $CI_{95} = 42.6\%$–49.0%) is even further ahead of accuracy for reliable kitchen design items ($M = 35.4\%$, $CI_{95} = 32.3\%$–38.6%). Likewise, for reliable items the mean difference in accuracy between strong and weak preferences doubles to 12.9% ($CI_{95} = 10.5\%$–15.3%), whereas for unreliable items, the effect of preference strength disappears. Stronger preferences were also more reliable themselves ($M = 59.3\%$, $CI_{95} = 57.9\%$–60.6%) compared to weaker preferences ($M = 48.8\%$, $CI_{95} = 47.6\%$–49.9%).

Stereotypical predictions

How well did participants know the preferences of an "average" person in their age group? The younger judges' stereotypical (modal) predictions matched the actual modal preference of their opposite-sex peers for 33.4% ($CI_{95} = 31.9\%$–35.0%) of the items on average. For older judges, the match was 44.4% ($CI_{95} = 41.7\%$–46.9%), indicating that they held more accurate knowledge about their peers in general and thus could make more use of stereotypical knowledge.

Next, we tested how often participants might have used their stereotypical knowledge to predict their own partner by calculating the overlap between their modal predictions (Study 2) and the predictions for their own partner (Study 1). Here, the overlap was smaller for younger judges ($M=42.5\%$, $CI_{95}=40.5\%–44.5\%$) than for older judges ($M=45.6\%$, $CI_{95}=41.4\%–49.8\%$). Together, this suggests that older couples relied more on their stereotypical knowledge to predict their partners in Study 1, while younger couples must have relied more on idiosyncratic knowledge to make their predictions and this knowledge proved to be a more valid predictor.

Comprehensive regression model

To test the influence of relationship length and domain on prediction accuracy together with the other predictors outlined above, we fit a series of probit-regression models to the probability of correctly predicting each of the 13,688 (116×118) single items in Study 1.[2] The analysis was conducted by means of the *glm*() function in *R*, version 2.11. The predictors in the first model were relationship length (short vs. long) and domain (food, movies, and kitchen). In the second model, target reliability (measured as the inverse of the absolute difference between the preference ratings in Studies 1 and 2), similarity (measured as the inverse of the absolute difference between preference ratings of judge and target in Study 1), preference strength (high vs. low), and relationship quality (RAS score centered at its mean) were added. The third model further included the interaction of relationship length with similarity. For all models, the reference condition depicted the "worst case" combination of older couples predicting kitchenette preferences (Model 1) for which their partners held different, weak, and unreliable preferences (Models 2 and 3). The parameter estimates are displayed in Table 1. Positive beta-weights indicate an increase in the probability of making a correct prediction.

The estimated coefficients in the first model are clearly different from zero, suggesting that relationship length and domain both exert statistically significant effects on prediction accuracy. When including the remaining predictors (Model 2), relationship length and domain remain important determinants of prediction accuracy, indicating that these variables are not superfluous or accounted for by the other predictors. Model 2 further indicates that similarity, preference strength, and reliability have the highest leverage on prediction accuracy. However, those variables were measured on the item level which presumably increased their statistical power.

The parameter estimates in Model 3 are comparable to Model 2 except that the main effect of relationship length gets absorbed by the interaction effect with similarity. This lends further support to the finding that the negative effect of relationship length is specific to the items for which couples do not have the same preference. As we will outline next, together these results allow evaluation of the moderators of prediction

---

[2] Because single items are nested within domains and individuals are nested within couples, we also tested a hierarchical Bayesian regression model (not reported) that fully accounts for the dependencies within the data, and with it confirmed the main results of the probit regression presented here.

accuracy among couples, and provide an explanation for why prediction accuracy might decrease in long-term relationships.

Discussion

In two studies, we compared prediction accuracy between younger couples in shorter relationships and older couples in longer relationships across three different preference domains, considering preference strength and reliability over time, couples' preference similarity and relationship quality, and stereotypicality of preferences. Our results indicate that older couples had lower accuracy in predicting each other's preferences than younger couples even though older couples in our study had spent on average nearly 40 years longer together. This lends support to our hypothesis that prediction accuracy decreases over the course of a relationship despite greater time and opportunity to learn about each other's likes and dislikes. How can this decline be explained?

One reason could be that older couples pay less attention to each other, because they view their relationship as already firmly committed or because they think they already know their partner well. This would also explain why older judges were more overconfident than younger ones. Moreover, younger couples' accuracy was greater for strong likes and dislikes, whereas for older couples, no such relationship existed. This further indicates that the older judges were not paying attention to the preferences of their partners, failing to differentiate between their strong and weak feelings. This possibility should be tested further; at the same time, our findings help to rule out the following other possible explanations.

While our results confirm previous research showing that preference similarity enhances prediction accuracy (Davis et al., 1986; Hoch, 1987; Lerouge & Warlop, 2006), we did not find a decrease in similarity over time that could account for the decrease in accuracy. Nevertheless, greater relationship length might have increased couples' *perception* of similarity which could explain why older couples projected their own preferences even for items for which their preferences did not match. Seeing a partner as more similar to oneself might help to maintain a positive relationship (Gagné & Lydon, 2004), but it can come at the price of having less accurate knowledge of each other.

Lower reliability of preferences among older targets, which could have made predictions more difficult, did not explain the decrease in prediction accuracy among couples in long-term relationships: While the results of Study 2 show that preference reliability is an important moderator of prediction accuracy and that younger participants had more reliable preferences, limiting our analysis to only reliable items produced even *greater* accuracy differences between older and younger couples. Reliability moderated the effects of other variables as well, indicating the importance of assessing reliability in future preference prediction studies.

Couples' knowledge of each other was clearly context-dependent, but domains that are more relevant in daily life, such as food, showed an even greater gap in prediction accuracy between shorter and longer relationships. This indicates that the mere opportunity for feedback and learning over the course of a

Table 1
Parameter estimates for the probit regression on prediction accuracy.

β coefficient	Model 1 (log-likelihood −9,124; df=4) [‡]			Model 2 (log-likelihood −7,206; df=8)			Model 3 (log-likelihood −7,198; df=9)		
	Estimate	SE	z	Estimate	SE	z	Estimate	SE	z
(Intercept)	−0.54	0.02	−21.67 [*]	−0.12	0.03	−3.43 [*]	−0.07	0.04	−1.86
Short relationship length	0.15	0.02	6.59 [*]	0.1	0.03	3.66 [*]	0.02	0.03	0.48
Food	0.33	0.03	12.42 [*]	0.28	0.03	9.14 [*]	0.28	0.03	9.19 [*]
Movies	0.22	0.03	8.32 [*]	0.16	0.03	5.19 [*]	0.16	0.03	5.19 [*]
Reliability				0.19	0.02	9.89 [*]	0.18	0.02	9.68 [*]
Similarity				0.39	0.02	25.29 [*]	0.39	0.02	25.29 [*]
Relationship quality				0.12	0.03	4.12 [*]	0.12	0.03	4.04 [*]
Strong target preferences				0.25	0.03	10.02 [*]	0.11	0.04	2.65 [†]
Similarity × relationship length							0.21	0.05	3.97 [*]

[*] $p(z=0) < .001$.

[†] $p(z=0) < .01$.

[‡] Log-likelihood of baseline model (intercept only)=−9,226 (df=1).

relationship is not sufficient to increase couples' mutual knowledge. Our results further indicate that stereotypical preferences are easier to predict, presumably because people could use their general knowledge to infer their partner's preferences (Davis et al., 1986; Gill & Swann, 2004). But this was also insufficient to erase the decreased accuracy among older couples, who were more homogenous in their preferences. Thus, the declining ability to predict the preferences of one's partner seems resistant to influences that should improve the ability over time.

Finally, neither younger nor older participants' predictions decreased in accuracy over the course of the experiment, which renders differences in fatigue an unlikely explanation for the difference between these two groups. However, we cannot rule out that other differences between older and younger couples contributed to the difference in prediction accuracy (Healey & Hasher, 2009). Potentially, younger or older couples may be more accurate for domains that are of special relevance for their age group. Prediction ability in older adults may also decrease as a result of general (cognitive) decline (Johnson, 2008). In line with this, older people might be less able to monitor and observe their partners, simply because their hearing and vision is impaired. Finally, the results could also be due to cohort effects such that older generations had made less accurate predictions from the beginning of their relationship (Ellis, Holmes, & Wright, 2010). Thus, future research should collect longitudinal data across a more diverse age group to further explore the nature and changes of preference prediction accuracy across the life span (Cole, Lee, & Yoon, 2009; Yoon, Cole, & Lee, 2009).

Acknowledgments

References

Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin*, *111*(2), 256−274.

Biesanz, J. C., West, S. G., & Millevoi, A. (2007). What do you learn about someone over time? The relationship between length of acquaintance and consensus and self-other agreement in judgments of personality. *Journal of Personality and Social Psychology*, *92*(1), 119−135.

Cole, C. A., Lee, M. P., & Yoon, C. (2009). An integration of perspectives on aging and consumer decision making. *Journal of Consumer Psychology*, *19*(1), 35−37.

Davis, H. L., Hoch, S. J., & Ragsdale, E. K. E. (1986). An anchoring and adjustment model of spousal predictions. *Journal of Consumer Research*, *13*(1), 25−37.

Ellis, A. W., Holmes, S. J., & Wright, R. L. (2010). Age of acquisition and the recognition of brand names: On the importance of being early. *Journal of Consumer Psychology*, *20*(1), 43−52.

Fagerlin, A., Ditto, P. H., Danks, J. H., Houts, R. M., & Smucker, W. D. (2001). Projection in surrogate decisions about life-sustaining medical treatments. *Health Psychology*, *20*(3), 166−175.

Feng, D., & Baker, L. (1994). Spouse similarity in attitudes, personality, and psychological well-being. *Behavior Genetics*, *24*(4), 357−364.

Funder, D. C (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review*, *102*(4), 652−670.

Funder, D. C., & Colvin, C. R (1988). Friends and strangers: Acquaintanceship, agreement, and the accuracy of personality judgment. *Journal of Personality and Social Psychology*, *55*(1), 149−158.

Gagné, F., & Lydon, J. (2004). Bias and accuracy in close relationships: An integrative review. *Personality and Social Psychology Review*, *8*(4), 322−338.

Gill, M. J., & Swann, W. B. (2004). On what it means to know someone: A matter of pragmatics. *Journal of Personality and Social Psychology*, *86*(3), 405−418.

Glicksohn, J., & Golan, H. (2001). Personality, cognitive style and assortative mating. *Personality and Individual Differences*, *30*(7), 1199−1209.

Guilford, J. P. (1954). *Psychometric methods.* New York: McGraw-Hill.

Healey, M. K., & Hasher, L. (2009). Limitations to the deficit attenuation hypothesis: Aging and decision making. *Journal of Consumer Psychology*, *19*(1), 17−22.

Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, *50*(1), 93−98.

Hoch, S. J. (1987). Perceived consensus and predictive accuracy: The pros and cons of projection. *Journal of Personality and Social Psychology*, *53*(2), 221−234.

Hoch, S. J. (1988). Who do we know: Predicting the interests and opinions of the American consumer. *Journal of Consumer Research*, *15*(3), 315−324.

Johnson, E. J. (2008). Man, my brain is tired: Linking depletion and cognitive effort in choice. *Journal of Consumer Psychology*, *18*(1), 14−16.

Kenny, D., & Acitelli, L. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality and Social Psychology*, *80*(3), 439−448.

Kenny, D., & DePaulo, B. (1993). Do people know how others view them? An empirical and theoretical account. *Psychological Bulletin*, *114*(1), 145−161.

Lerouge, D., & Warlop, L. (2006). Why it is so hard to predict our partner's product preferences: The effect of target familiarity on prediction accuracy. *Journal of Consumer Research*, *33*(3), 393−402.

Mata, J., Scheibehenne, B., & Todd, P. M. (2008). Predicting children's meal preferences: How much do parents know? *Appetite*, *50*(2–3), 367−375.

Murray, S., Holmes, J., & Griffin, D. (1996). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology*, *71*(6), 1155−1180.

Neyer, F. J., Banse, R., & Asendorpf, J. B. (1999). The role of projection and empathic accuracy in dyadic perception between older twins. *Journal of Social and Personal Relationships*, *16*(4), 419−442.

Oyserman, D. (2009). Identity-based motivation: Implications for action-readiness, procedural-readiness, and consumer behavior. *Journal of Consumer Psychology*, *19*(3), 250−260.

Ross, L., Greene, D., & House, P. (1977). The "false consensus effect": An egocentric bias in social perception and attribution processes. *Journal of Experimental Social Psychology*, *13*(3), 279−301.

Rozin, P., Riklis, J., & Margolis, L. (2004). Mutual exposure or close peer relationships do not seem to foster increased similarity in food, music or television program preferences. *Appetite*, *42*(1), 41−48.

Sander, J., & Böcker, S. (1993). Die deutsche Form der Relationship Assessment Scale (RAS): Eine kurze Skala zur Messung der Zufriedenheit in einer Partnerschaft [The German version of the Relationship Assessment Scale (RAS): A short scale for the assessment of satisfaction in a romantic partnership]. *Diagnostica*, *39*, 55−62.

Schul, Y., & Vinokur, A. (2000). Projection in person perception among spouses as a function of the similarity in their shared experiences. *Journal of Personality and Social Psychology*, *26*(8), 987−1001.

Shalowitz, D. I., Garrett-Mayer, E., & Wendler, D. (2006). The accuracy of surrogate decision makers: A systematic review. *Archives of Internal Medicine*, *166*(5), 493−497.

Shannon, C. E. (1948). A mathematical theory of communication. *Bell System Technical Journal*, *27*, 379–423.

Spearman, C. (1904). The proof and measurement of association between two things. *American Journal of Psychology*, *15*, 72−101.

Swann, W. B., & Gill, M. J. (1997). Confidence and accuracy in person perception: Do we know what we think we know about our relationship partners? *Journal of Personality and Social Psychology*, *73*(4), 747−757.

Thomas, G., & Fletcher, G. J. O. (2003). Mind-reading accuracy in intimate relationships: Assessing the roles of the relationship, the target, and the judge. *Journal of Personality and Social Psychology*, *85*(6), 1079−1094.

Wansink, B. (2006). Nutritional gatekeepers and the 72% solution. *Journal of the American Dietetic Association*, *106*(9), 1324−1326.

West, P. M. (1996). Predicting preferences: An examination of agent learning. *Journal of Consumer Research*, *23*(1), 68−80.

Wood, W., & Neal, D. T. (2009). The habitual consumer. *Journal of Consumer Psychology*, *19*(4), 579−592.

Yoon, C., Cole, C. A., & Lee, M. P. (2009). Consumer decision making and aging: Current knowledge and future directions. *Journal of Consumer Psychology*, *19*(1), 2−16.