Affective Forecasting

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Abstract:

This chapter outlines the topic of affective forecasting, the process of predicting one's future feelings (Gilbert & Wilson, 2007). Although people are often fairly skilled at making these sorts of predictions, examples of systematic errors in forecasting are laid out. Key topics related to this topic are defined and the reasons underlying errors in forecasting are explored. Also considered are correctives to affective forecasting errors, with the goal of offering advice on how to make better predictions of future feelings.

Keywords: Affective forecasting, hedonic adaptation, self-knowledge

"*All decisions are based on predictions of future feelings* " (March, 1978).

Imagine being in the fortunate position of receiving two job offers. One is geographically close to family and friends, yet the work sounds a bit dull and the job offers little opportunity for advancement. The other would require a cross-country move to a new city, but the workplace sounds dynamic and the work meaningful.

Which job do you choose? This decision requires a complicated line of reasoning. You have to weigh the importance of social ties against the value of meaningful work. You have to project into a foreign future, envisioning likely but inherently unknowable scenarios. Undoubtedly, at some point all of this internal debate would take the shape of a seemingly simple question: Which of these two scenarios would ultimately make you happier?

This sort of question is one we ask regularly—about large matters like job offers, but also about everyday decisions. Will I feel better if I eat a salad or a bacon cheeseburger for lunch? Would a date with Joe be fun, dreadful, or somewhere in between? Would that new piece of furniture bring me enough happiness to justify the money I'm about to spend on it?

All of these questions require making an *affective forecast*, a prediction of your future feelings. They require that we mentally create a hypothetical future, making our best guess not only of how a situation will unfold, but exactly how we will feel as it does. *Prospection*, this process of thinking into the future in this way, is a uniquely human experience and it provides numerous advantages (Gilbert & Wilson, 2007). Without it, we'd be blindly guessing at our tastes and preferences. Choosing a job, a lunch, a date, or a consumer purchase would be complete guesswork, and we'd be just as well off flipping a coin. The question is, however, exactly how good are we at this process of affective forecasting? Do self-knowledge and the power of prospection offer any advantages, or are we better off with a coin flip?

To be certain, humans have survived and thrived because of the power of prospection. We generally can identify causes of pleasure and causes of pain. We very often learn from our mistakes. So, while it is easy and fascinating to lay out the many mistakes we make, it is important to mention and keep in mind that we must be reasonably good forecasters to function well in a complex world.

Indeed, while we are generally accurate when making crude predictions of emotional valence (for example, ice cream will be good, dental work will be bad), systematic errors are more likely to occur when making more nuanced predictions, such as when guessing just how intensely and for how long an emotional reaction may last. Starting in the mid-1990s, this area of research has revealed systematic lapses in self-knowledge. The basic paradigm of an affective forecasting experiment involves randomly assigning participants to the role of either *forecaster* or *experiencer* (e.g., Gilbert, Pinel, Wilson, Blumberg, &

Wheatley, 1998; Wilson, Centerbar, Kermer & Gilbert, 2005; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000). Forecasters are asked to imagine a scenario playing out and predicting how they might feel in that scenario. Experiencers, on the other hand, actually live out the scenario and report their actual feelings about it. When comparing the reactions of the two groups and seeing no difference, we can conclude there is no forecasting error: people's predictions align with reality. But if there is a discrepancy —in terms of intensity, valence, or duration—a forecasting error may be taking place.

Across a variety of situations, it has been demonstrated that we are poor predictors of our future emotional states. From the outcomes of elections, promotions, romantic breakups, winning the lottery, and losing a football game, we systematically mispredict the intensity and duration of our emotional reactions to future life events (e.g., Wilson & Gilbert, 2008; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000). Simply put, we don't always know what will make us happy and for how long. Relatedly, then, we are also poor at knowing what decisions will bring us the happiness that we seek (Mellers & McGraw, 2001): job choices, romantic partners, meal preferences and more are prone to affective forecasting errors.

Key Concepts in Affective Forecasting Research

The *impact bias* refers to the pervasive tendency to overestimate both the intensity and duration of an emotional reaction. As the term suggests, future events tend to be thought of as more powerful than they are when they actually occur. Parsing further, *duration neglect* is defined as the common experience of overestimating just how long something will be emotionally impactful (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998). We may know that an unexpected romantic breakup will be painful, but as we predict just how bad it will be, we expect the pain to linger for months or even years. In reality, it will likely start to fade much faster. Note that while this is certainly desirable when it comes to negative life events—it has a lot in common with the concept of resilience—it can be a challenge to lasting happiness when it comes to positive events, as explained later.

A related concept, which helps to explain just why duration neglect occurs, is *focalism* or the *focusing illusion*—the tendency to hone in on one isolated future event at the expense of everything else that is likely to be going on around it. For example, when asked to imagine how they would feel if their school's football team won or lost an upcoming game, students overestimated how long their feelings would linger, because they were failing to account for all the other things that would also be taking place in their daily lives (Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000). Sure, they would be a little disappointed if their team were to lose, but there will be exams to take, meals to eat, and friends to spend time with. In another study (Schkade & Kahneman, 1998), a sample of Midwestern and Southern Californian college students were asked to report on their own personal happiness, and also predict the happiness of a typical student in the other location. While there was no significant difference between groups, Midwestern college students thought that Southern Californians would be happier, because they were focusing too much on unique and pleasant features of that location: sunshine and beaches, for instance. They were missing so much of the everyday life things—classes, social life, housework—that they have in common.

Exploring Possible Mechanisms

Why do affective forecasting errors exist? And why do they persist, even as we see the outcomes of our errors in everyday life time and time again? Several potential underlying mechanisms offer explanations why.

Misconstrual. One simple reason for affective forecasting errors is the fact that we often erroneously imagine the future experience in question (Wilson & Gilbert, 2003). Prospection is rife with errors; without a crystal ball, we cannot perfectly gauge what any future experience will truly be like. If a vacationer predicts that her upcoming beach trip will be wonderful and it turns out terribly, this could be because she was envisioning a deserted white sand beach and perfect weather, rather than a crowded, loud, or rainy one. In this case, the root of the error is less psychological and more environmental.

Hedonic adaptation. It is difficult to discuss affective forecasting in depth without considering the role of *hedonic adaptation* (Brickman, Coates, & Janoff-Bulman, 1978; Diener, Lucas, & Napa Scollon, 2006). Due to this process, over time and through repeated exposure, emotional events go from the forefront to the background of our attention. This is a highly functional process. It is maladaptive to keep attention focused on a past event and more adaptive to attend to immediate challenges. Adaptation happens in very basic ways, for example, the tenth candy is seldom as enjoyable as the first. It can also operate on major life events: getting into a dream college or falling in love is tremendously exciting at first, but it gradually ceases to be so. Daily life takes over our attention and it becomes increasingly challenging to attend to our past triumphs and defeats.

Importantly for accurate affective forecasting, it seems that we fail to realize the extent to which we

adapt to emotional events. This is part of why we make forecasting errors (Loewenstein & Schkade, 1999). Instead, when we do experience short-lived joy or pain, we sometimes chalk it up to the object of our forecast ("Dating Chris isn't nearly as fun as I expected. I guess he's not the Prince Charming I thought he was.") rather than to our "psychological immune systems" (Wilson, Meyers, & Gilbert, 2001). Gilbert, Pinel, Wilson, Blumberg, and Wheatley (1998) use the term *immune neglect* to describe the behind-the-scenes inner workings of our mental and emotional systems. Because we don't always have conscious access to these neutralizing processes, we can be surprised when emotional experiences lose their power over time.

Ease of explanation. In their AREA (attend, react, explain, adapt) model of hedonic adaptation, Wilson and Gilbert (2008) posit that when something emotionally-relevant happens, it draws our attention and we respond with some experience of happiness or sadness. As is well-established, hedonic adaptation will likely occur next. The critical next step, which determines the rate of adaptation, is *sense-making*. Why did this event occur? In an effort to understand the whys and hows of what happened, we try our best to explain the event. "He asked me out because we have a similar sense of humor and are both baseball fans" or "I didn't get the job because I was less qualified than the other applicants."

This satisfies our need to know but destroys a bit of the mystique. With any unexplained event, there is a good deal of uncertainty and much material for reflection ("Why did this happen?"). Once we have an explanation, we will move on to other, more pressing concerns. In short, life goes on.

It follows that if we can keep the mystery alive with a lack of explanation, we might be able to inhibit adaptation and keep things a source of joy for a longer period of time. Several studies confirmed this: when receiving compliments from a series of potential "dates," participants were in an elevated mood for longer when they didn't know which date had paid them which compliment (Wilson, Centerbar, Kermer & Gilbert, 2005). When entered into a raffle to win one of two desirable prizes, participants were happier longer when they had to wait to find out which prize they won, as compared to finding out immediately (Kurtz, Wilson, & Gilbert, 2007). Notably, forecaster participants (those who were asked to simply predict their feelings) said they would prefer to have their curiosity satisfied rather than to remain uncertain about the outcome, an intuition that actually seems to diminish enjoyment. In fact, to inhibit hedonic adaptation, it helps to have an air of mystery or inexplicability about the event in question. It keeps the event salient in mind as we mentally replay it to try to understand it better. (Naturally, the opposite is true of negative life events. To promote recovery and resilience, understanding the negative event— explaining it or making sense of it—is generally preferable.)

This concept has far-reaching implications. In the context of romantic relationships, the early stages are often characterized by intense longing and all-consuming thoughts along the lines of, "Does this person really like me?" As agonizing as this mindset can be, research by Whitchurch, Wilson, and Gilbert (2011) revealed that this period of questioning may maintain the allure of a new potential partner. In an online dating simulation, female participants who believed that a sample of men were interested in dating them were more attracted to the men than women who thought the men liked them only an average amount (i.e., we like those who like us). However, the women who found the men the *most* attractive were the ones who weren't sure whether those men liked them or not. Their uncertainty led them to think about the men the most, perhaps serving as a cue to their own level of interest, and this increased their attraction toward the men.

For long-term relationships, Koo, Algoe, Wilson, and Gilbert (2008) adapted this idea into a counterintuitive strategy for relationship satisfaction. Married participants were asked to vividly imagine how they might not have met their spouse (and, by extension, how they wouldn't have the life they have currently). This "mental subtraction" seemed to make their marriages seem less explainable and inevitable and more surprising. This increased their levels of appreciation and satisfaction, compared to a neutral control group. Importantly, a sample of forecaster participants failed to see the advantages of mental subtraction, believing that thinking about a life without their spouses would be more sad than it actually was.

Projections across time. Affective forecasts, by definition, require a certain "psychological time travel," whereby we project into the future to estimate what our feelings might be. However, the present (i.e., the time of the forecast) and the future can vary in critically important ways in ways we fail to realize. The *projection bias* describes the tendency to falsely project current preferences onto a future event (Loewenstein, O'Donoghue, & Rabin, 2003).

One well-documented temporal disconnect is known as the hot-cold empathy gap. Loewenstein, O'Donoghue, and Rabin (2003), for instance, found that people who had just eaten dinner underestimated how much they would enjoy the next day's breakfast. In the moment of the forecast, they were feeling satiated, and that distinct physical feeling couldn't help but weigh into their judgment of how they would

feel the next morning. A similar experience can be found at the grocery store, where hungry shoppers often buy more food than they want later, because their inner state is providing powerful—but erroneous—suggestions of future desires. This gap can also occur interpersonally. Van Boven and Gilovich (2003) found that one's own level of thirst dictated how much they estimated another person would want a drink.

Past experiences can also color future forecasts. When looking back on a past positive experience, such as when one's preferred candidate won an election, participants recalled being happier in that moment than they actually had reported as it was unfolding (Wilson, Meyers, & Gilbert, 2003).

A well-accepted fact that memory is a reconstruction of past events, prone to numerous biases and errors (Schacter, 1989). What is less known is that certain *kinds* of life events are prone to a unique reconstructive bias known as the *rosy view*. Specifically, experiences that are generally positive, bounded in time (they have a clear beginning and an end), and free from an evaluative outcome (there is no win or lose) are often recalled as being better than they were when they were actually happening.

For example, Mitchell, Thompson, Peterson, and Cronk (1997) researchers surveyed cyclists on a three-week tour of California. While their daily experiences were characterized by high points such as pedaling along the Pacific coastline or making new friends, they also had a lot of neutral and negative moments to deal with – rain, hills, traffic, and so on. When asked to think back and report on their overall experience of the trip, however, they consistently reported it as being better than the sum of its reported moments. Other studies found a similar pattern for both families on a Disneyland vacation and in a sample of marathon runners (Lemm & Wirtz, 2013; Sutton, 1992). These gaps seem to get larger as the time between forecast and experience widens (Gilovich, Kerr, & Medvec, 1993).

Incorrect lay theories. It is in the best interest of marketers to convince consumers that their product or service will greatly enhance their lives. Romantic comedies send the message that a loving relationship is the key to everlasting happiness. Messages such as this can easily become internalized. As a result, it is easy to see how we might overestimate our future happiness when acquiring a new possession, meeting a new potential partner, and more.

The power of rationalization. A final reason for the persistence of affective forecasting errors—particularly the impact bias—is the misunderstanding of the power of rationalization. This is demonstrated in Gilbert and Ebert's (2002) study on reversible versus nonreversible decisions. At the end of a very involved photography class, participants were told that they could keep only one photograph that they had taken. Some were further told that they had a few days to change their minds, at which point they could easily trade in their chosen photograph for a different one. Others were told that their decision was nonreversible; whatever photograph they chose was the one they had to keep. Surprisingly, those who were not allowed to change their minds made the best of things and came to like their photograph more than those who were allowed to reconsider it. In short, we rationalize what we cannot change. Importantly, a sample of forecasters expressed a strong preference for the opposite, preferring to have the freedom to change their minds. This experiment has far-reaching implications for the surprising downside of an escape clause, from decisions ranging from buying a new mattress to choosing a spouse. In a follow-up, Lieberman and colleagues (2001) found that coming to love what you own is displayed even in retrograde amnesiacs. They cannot overtly recall what objects they own, but somehow they know that it is superior to what they don't own.

Not all of life's events are rationalized in the same way. In fact, it is often surprising how catastrophes can be quickly explained away, while minor irritations linger. Imagine that you have a squeaky door jam. Multiple times per day, you open the door, hear the annoying squeak, and feel minor irritation. It bothers you, but not quite enough to act upon. Now, imagine instead that a tree falls through your front window, causing major damage. You are on the phone immediately, arranging to get it fixed. The surprising end result is that the accumulated annoyance will be greater for the squeaky door than for the much bigger problem of the broken window. Gilbert, Lieberman, Morewedge and Wilson (2004) posited that our emotional systems may work similarly. We are motivated to make sense of and recover from extremely upsetting events—being insulted by a loved one, for one—but we are less motivated to bounce back from, say, a seemingly minor insult from a stranger. Because that unconscious motivation is lower, insults from strangers tend to linger. Again, people get it wrong, thinking that it would be far preferable to be insulted by an irrelevant person than a significant one.

Individual Differences in Forecasting Ability

While affective forecasting errors are extremely common, some people tend to be more accurate than others when predicting future feelings. While research on individual differences in forecasting ability seems relatively limited, studies show that emotional intelligence—an awareness of one's internal affective state—allows people to make more accurate predictions of future feelings (Dunn, Brackett, Ashton-James,

Schneiderman, & Salovey, 2007; Hoerger, Chapman, Epstein, & Duberstein, 2012). Higher levels of mindfulness have also been linked to more accurate forecasts (Emanuel, Updegraff, Kalmbach, & Ciesla, 2010). Both of these traits allow open, nonjudgmental access to one's inner life. This information can be helpful in promoting sound judgments of future feelings as well.

By contrast, certain dispositions bias us to particular kinds of information, which can cloud judgments of future feelings. Those with depressive symptoms are especially likely to overestimate negative emotional reactions but underestimate positive ones (Hoerger, Quirk, Chapman, & Duberstein, 2012; Marroquín, & Nolen-Hoeksema, 2015). Most people, but especially those with clinical panic and anxiety disorders, tend to overestimate their future fear responses (Arntz, Hildebrand, & van den Hout, 1994; Rachman, 1994). A fear of anxiety-producing situations can perpetuate the disorder by reinforcing avoidance behaviors (Reiss, Peterson, Gursky, & McNally, 1986). In fact, mental illnesses have also been framed as, in part, errors in affective forecasting.

Also, there is mixed evidence that older people are better at predicting certain kinds of emotional experiences. Specifically, older adults seem better able to make refined judgments of future emotions (Nielsen, Knutson, & Carstensen, 2008).

Interestingly, forecasters tend to downplay the role of their personality when making forecasts. For example, those dispositionally high in optimism tended to underestimate the role this trait would play in their affective reaction to receiving bad news (Quoidbach & Dunn, 2010). This "personality neglect"-- a person's tendency to overlook their personality when making decisions about their future emotions – can be another source of blind spots in forecasting.

Implications for Long-Term Happiness and Well-Being

The ability to forecast well has many implications for happiness and health-related behaviors (Loewenstein, 2007; Sieff, Dawes, & Loewenstein, 1999). In fact, as argued by Hsee and Hastie (2006), many major life decisions from the short-term – resisting that carton of ice cream to the long -- saving for retirement and staying up-to-date with health screenings assume that people are rational and accurate forecasters.

It is clear that, contrary to these assumptions, affective forecasting errors can actually interfere with the ability to make sound decisions for the future. We tend to overestimate our levels of self-control (Stutzer & Frey, 2007).

Interpersonal relationships. Mallett, Wilson, and Gilbert (2008) conducted a series of studies that have important implications for outgroup relations. When told that they would be interacting with students outside of their racial or ethnic groups, participants overestimated the extent to which this interaction would be unpleasant, relative to other participants' actual experiences. This was because they focused on the differences between themselves and the outgroup member when, in actuality, they were similar in many ways (age, college student status, etc.). Importantly, though, it seemed that this bias could be partially undone: interactions were expected to be more pleasant when participants were first asked to generate reasons they were similar to the outgroup members. This took the spotlight off of their apparent differences and reminded them of the many similarities that actually existed between them.

In the context of romantic relationships, affective forecasting errors play out in other important ways. For instance, when coping with a romantic breakup, people tend to overestimate how long they will take to recover. These errors occur because people initially overestimate the intensity of their emotional reactions to the breakup (which may be accurate in the very early, very painful stages), but then they use this intense reaction as a basis for judgment (Eastwick, Finkel, Krishnamurti, & Loewenstein, 2007). In short, they underestimate their own levels of resilience.

Consumer behavior. Affective forecasting errors and a general lapse in self-knowledge have serious implications for how consumers allot their money. In their review of the literature, Dunn, Gilbert, and Wilson (2011) argue that a primary reason for the unimpressive correlation between income and happiness is the fact the we do not always spend money in a way that reliably promotes happiness. Short of true love and good health, money can buy most everything. So, as the authors argue, if money doesn't make you happy, you may not be spending it right. Well-documented spending habits that are related to higher levels of happiness are: buying experiences rather than material possessions, making it difficult to return a purchase, limiting options, spending money on others rather than on the self, and buying many small pleasures instead of one large one. There is much evidence to suggest that consumers do not always spend in accordance with these principles.

Improving Affective Forecasts

As long as the future remains uncertain, affective forecasting errors are likely to occur. And despite

how frequently they befall us, they have a tendency to be "sticky" – we do not learn from our mistakes as much as we might think (Meyvis, Ratner, & Levav, 2008; Wilson, Meyers, & Gilbert, 2001). However, some techniques do show promise at improving our accuracy.

Prospective diaries. After demonstrating the traditional affective forecasting errors (overestimating how long their feelings would last after a football win or loss), Wilson and colleagues (2001) had participants think ahead to all of the things that may happen in their lives on a typical day. This broadened perspective seemed to pull focus from the football game that was so overarching in their forecasts. As a result, they did not overestimate how long their emotional reactions would linger. In practice, then, when grappling with a decision of how happy or sad something may make you, it may increase accuracy if you think ahead and imagine an ordinary day in your life. In their study on social interactions with an outgroup member, Mallett, Wilson, and Gilbert (2008) used a short term version of this to remind participants that there is more to a person than their outgroup status. Techniques that encourage more big-picture processing show promise at reducing certain kinds of forecasting errors.

Imagining one's future self. Thinking accurately about the future is key to sound decision making. However, we often think of our future selves as distant strangers, more like members of an outgroup (Burum, Gilbert, & Wilson, 2016), which can make sound decision making difficult. They find that people who feel connected to their future selves tend to make better, more ethical decisions (Hershfield, Cohen, & Thompson, 2012). They are more likely to consider long-term consequences of their behavior and show fewer signs of delinquency. While this is thought to be an individual difference (i.e., conscientiousness), they have also found that strengthening the accessibility and saliency of the future self can improve long-term decision making.

In one study, for instance, those who wrote a letter to their hypothetical future self were less inclined to make impulsive, delinquent choices, relative to a control group. In a second study, the researchers created age-progressed photographs of participants using a computer program. After interacting with this "future self," participants were less likely to cheat on a subsequent task, relative to controls (Van Gelder, Hershfield, & Nordgren, 2013). Envisioning one's future self in a vivid way (again, viewing age-progressed photos of oneself) also motivates people to save more for retirement (Hershfield et al., 2011) because the distant future seems more accessible and concrete.

Surrogation. One promising correction to forecasting errors is to rely less on our own assessments of our future feelings, which are often rather uninformed, and to instead consult other people, particularly those who have experienced something like it themselves. This strategy is known as surrogation. In one study (Gilbert, Killingsworth, Eyre, & Wilson, 2009), a group of college women were given the facts about someone they were about to meet on a five-minute speed-date. Each woman learned facts—his hometown, age, height, and favorite movie, and they also saw his photograph. Armed with this information, she could imagine what the date might actually be like. Other participants were given a *different* woman's account of how her date with him actually went. Note that only the other woman in the study knows what he was really like (at least, what could be revealed in the span of five minutes). And, indeed, the study found that the women's actual impression of him, after meeting him, aligned with that of the surrogate – the woman who had spent time with him previously. Importantly, participants failed to realize this, believing that their own, relatively uninformed impressions would be much more useful. This can easily give rise to overconfidence.

In short, we overestimate our ability to accurately imagine and predict our feelings about future events, and undervalue the experiences of people in our social networks. However, relying on the opinions of well-informed others, be they friends or strangers (Eggleston, Wilson, Lee, & Gilbert, 2015), can help undo forecasting errors.

Issues of Replication

Recently, the replicability of well-known social psychological phenomena has been called into question (Open Science Collaboration, 2015) and affective forecasting research has not been exempted from this criticism. One particular debate surrounds the legitimacy of the impact bias itself. In four studies and a meta-analytic review, Levine, Lench, Kaplan, and Safer (2012) argue that the tendency to overestimate the emotional reaction we have to future events is merely a procedural artifact. Specifically, they argue that a disconnect occurs when participants are asked to predict future feelings very broadly, without being given something specific to focus on, and this is the reason why errors are demonstrated. In essence, forecaster participants may be imagining something very different from what experiencers are rating. Any disconnect in their affect ratings, then, are inflated by this difference in focus. The authors suggest that clarifying the forecasting question (i.e., what are participants supposed to be focusing on, exactly?) reduces errors. In a response, Wilson and Gilbert (2013) state that Levine's argument was artificially bolstered by a highly selective literature review and a series of coding and translational

problems. In their response, Levine and colleagues (2013) maintained that their procedural revision (i.e., that a slight change in forecasting instructions eliminated the typical affective forecasting effect) reduced forecasting errors somewhat, but agree that it has not been completely eliminated.

What Remains Unknown?

There is considerable research establishing the existence of affective forecasting errors, as well as on the underlying mechanisms that account for their existence. Considerably less is known about individual differences in forecasting abilities. While research on certain traits, such as mindfulness and emotional intelligence, suggests some people are more accurate than others, more work on this topic is needed. The same is true for the external conditions that make it especially difficult for one to predict future feelings accurately. To what extent do marketers feed into the impact bias, for instance? Finally, cross-cultural differences in forecasting ability is a relatively unstudied topic that is worthy of investigation (although see Lam et al., 2005, who demonstrated that East Asians tend to make more accurate forecasts than Westerners, particularly for positive events).

Another important future direction involves dissecting when people are most likely to make forecasting errors. To be certain, there are times when we are quite good at knowing when a decision is good or bad – survival requires this precision. When, then, do the errors make themselves known? Is it a function of novelty, such that brand-new, foreign experiences are harder to predict than the familiar? Are we often misled by the erroneous opinions of others, for example, marketers convincingly arguing that their product will bring us far more joy than we can reasonable expect? Breaking down the nuances of the forecasting process – when we are accurate and when we are not – is yet another avenue for future research.

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