## **Back Page: Driven From Distractions**

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**Lotte van Dillen**, an associate professor of psychology at Leiden University, studies the role of affect in decision making, exploring questions such as how attention influences desire, pleasure, and consumption; how feelings shape moral and punitive judgments; and how to facilitate sound financial decision making, even under less than optimal circumstances.



Lotte van Dillen (Leiden University)

#### What specifically led to your interest in the role of affect in decision making?

Affect is made of feeling and thinking; it's about making sense of our sensory experiences: whether we perceive a threat or opportunity, and how we respond to this. Studying the role of affective processes in decision making allows you to look at the body, the brain, the (social) context, and actual behavior, all at the same time. I've always had a hard time choosing between subjects, so for an omnivore like me it makes for a perfect topic. My integrative outlook also represents how I see human behavior, as the result of a complex interplay between internal and external factors, and it has clear applied relevance as it helps explain why people seem to make choices that go against their interests (at least from a rational point of view).

A central premise of your research is that our mental capacity is limited, which can suppress sensory experiences and lead to unhealthy behaviors. It seems we've only become more distracted since your 2013 study showing how task load reduces taste perception. What gives you hope that we're adjusting our priorities and changing our practices in healthy ways?

I think it's true that we're now more distracted than ever. To illustrate, in two different surveys (in prep.) we've found that Dutch citizens engage in multitasking during at least 75% of their meals and

snacks. Technological and economic developments have realized a society where we can do whatever we want wherever we are at any moment in time. The recent lockdown measures that we've seen across the globe have made people contemplate the necessity of leading a fast-paced life (those who can afford it, that is). Still, that same lockdown has also speeded up further technological developments such as digitization and home delivery, which allows for even more multitasking. So attention is becoming a scarce resource. That said, I don't think this means we should all start meditating or train our attention in other ways; you can build simple habits in your daily lives to prevent too much distraction. These include treating consumption moments as separate activities and putting away your devices while eating. And especially when you decide to indulge, you might just as well get the most out of those unhealthy but tasty calories.

Some of your more recent research has focused on financial behavior. What do you consider your most significant findings about we can facilitate better financial decision making, including under the difficult financial circumstances many people are facing?

Most of our work in this domain involves the negative impact of financial strain on decision making, and we collaborate with policymakers, credit companies, and banks to minimize those effects. Having financial stress (which need not relate to actual resources) compromises one's capacity to adequately weigh and prioritize information. So anything that helps people in this process is useful, such as clarifying the total costs of a loan next to its monthly rates, or reminding people of their appointments with practitioners. Policy makers sometimes wrongly attribute people's mistakes and failures to comply with regulations or live up to agreements to being lazy or unmotivated. In reality, regulations are oftentimes just too difficult to decipher, or people are just too busy making ends meet.

## Tell us about the objectives of the Work Hard, Play Hard collaboration you're involved with.

In this project, together with my long-term collaborator Wilhelm Hofmann, we aim to examine the consequences of distracted consumption. We argue that mental load, induced by concurrent tasks or concerns, interferes with reward processing from consumption. Because people strive to obtain pleasure from the goods they consume, they employ compensatory behaviors to up-regulate hedonic value. We advance a new framework to understand this phenomenon, which we have labeled hedonic compensation. Through the integration of lab-based behavioral neuroscience experiments with experience sampling studies in the field, we hope to gain more insight in the relationship between mental capacity, hedonic experience, and consumption, and in the problems resulting from an imbalance between these factors. By extending our findings to other consumption domains, and to the real world, we study the general nature of hedonic compensation. In the end, we hope that insights from this project may lead to new tools to help people live a more fulfilling and healthy life.

#### What findings has the project yielded so far?

Whereas the project is only in its second year (including a lockdown and a pregnancy), we already have some interesting results (in prep and under review). As already alluded to, we have some survey data on the prevalence of distracted consumption, which interestingly correlates positively with BMI, an important index of overconsumption. Our Netherlands-based postdoc Floor van Meer is currently writing up behavioral and neuroscience results that further support our initial finding that distraction suppresses tasting and that this yields compensatory consumption behaviors. Our postdoc in Bochum,

Stephen Murphy, is currently collecting the first experience sampling data, but this is still in the making so I can't say much about it yet.

## Your integrative approach is also reflected in your collaborations outside academia. How have professionals such as police officers and legal professionals applied your research in their work?

For several years, I have been working with professionals outside academia, and so far I have learned at least as much from them as I have been able to teach them. The point I want to make is that it takes time to establish a fruitful relationship with stakeholders outside academia, and you should be as willing to incorporate new insights in your work as the other way around. I feel like only now I have come to the point where I am able to provide some useful advice. For example, in a recent project for the police we have studied the use of visual evidence during crime investigations and interrogations. Because most people treat such evidence as 'more objective,' there can be a risk of overinterpretation, on both the side of the police and the suspects.

As a follow-up, we are now developing and testing feasible guidelines to facilitate so-called 'visual literacy' among police officers as well as legal professionals. I also incorporate these and other findings in my teaching about psychological biases in decision making for legislators and judges.

## You take an equally integrative approach to your research methods, for example combining labbased behavioral neuroscience experiments with experience sampling studies in the field. How have you adjusted these methods in the wake of the COVID-19 pandemic?

We were lucky to have a lot of data sitting on our desks, so it actually allowed us to get some stuff done that should have been taken care of a long time ago. But we've recently begun setting up a new fMRI experiment for the ORA project, which would have already been extensive even without the measures taken, so that involves a lot of extra work. We have decided to accept the situation and proceed gradually and prepare as well as we can so that whatever data we are able to collect will be of the best possible quality....

# What career guidance would you offer to students and other early-career researchers facing an uncertain job market?

I don't have a cookbook recipe, but one thing that has always struck me as odd is this persistent ideal of the popstar scientist that people hold on to: someone who publishes in the most prestigious journals, gets all the grant money, and is regularly covered in the media. Yes, those people exist, and they are highly visible, but this is just one variation of what 'the academic' could look like, and it creates a rat race that is just untenable. So don't fall for the availability bias here.

I've heard a master's student say that they like a certain topic but won't pursue their interests further because they think it will not yield any grant money. The fact that someone this young restricts themselves in such a way I find rather depressing, even though I am well aware of the stress that comes with the uncertainty of (even obtaining) a temporary position and the feeling it gives that you need to be 'strategic.' Restricting yourself in this way is unnecessary and is often based on false assumptions. It's also bad for science because it leads to many people doing more or less the same thing.

But nowadays psychological scientists are in high demand among governmental institutions and businesses, and it seems that the boundaries between jobs inside and outside universities have blurred. This has created many novel opportunities worth exploring. Look around, be curious and ask (junior and senior) colleagues about their experiences inside and outside academia. Not only will this help you get a more realistic outlook on your career opportunities, it also helps you extend your network and build a support group of peers.

## What's next for your research?

In the coming years I will continue my research on distracted consumption, looking into the concept of hedonic compensation, as part of our 'Work Hard, Play Hard' project. I will also dig deeper into its (potential) direct metabolic effects, for example of dysregulated glucose uptake due to compromised taste processing. I will further strengthen our collaborations with the police and other institutions on debiasing and strengthening decision making. And I will keep an eye open for exciting new opportunities.

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