

Outsourcing Responsibility for Indulgent Food Consumption to Prevent Negative Affect

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ABSTRACT To many consumers, indulging in unhealthy treats is a “vice” and can cause unpleasant feelings, such as guilt. Nonetheless, consumers do not want to give up indulgences altogether and find ways to allow themselves guilt-free gratification. We propose a novel, calculated tactic that consumers use to avoid unpleasant feelings often associated with unhealthy eating. Four studies demonstrate that consumers proactively and strategically confer responsibility for indulgences to other people to prevent looming negative feelings about consuming the same item. In laboratory and field experiments, for unhealthy (compared to healthy) foods consumers exhibit a preference for being served a chosen food instead of serving themselves. Moderation and mediation show that this preference is driven by anticipated negative self-conscious affect, which gives rise to a motivation to avoid responsibility. Across our studies, people seek to alter the social context surrounding indulgent food consumption in this way, despite making their own food choices.

Nearly half of the respondents in Nielsen’s (2015) Global Wellness Survey consider themselves overweight, and 50% claim they are actively trying to lose weight. The most prominent strategy to achieve this goal, as reported in this survey, is changing one’s diet, including avoiding indulgences such as fats (65%) or chocolate and candy (62%). However, these noble intentions are apparently not always followed up with actual behavior: while Nielsen’s survey respondents intend to cut down on indulgent foods, they also report they plan to continue buying indulgent foods like cookies and cakes (47%) or ice cream (44%; Nielsen 2015).

Clearly, many consumers do not (want to) give up indulging, despite their wish to eat more healthily and lose weight. However, research shows that when consumers have a goal of healthy eating but end up indulging, they experience aversive feelings such as stress, guilt, and regret (Fletcher et al. 2007; Ramanathan and Williams 2007). How can a consumer indulge while also controlling the negative feelings that may follow? We suggest that one way to do this may be through strategic preemptive behavior that facilitates motivated reasoning later on.

Research on motivated reasoning suggests that people apply a wealth of mental tactics to construe evaluations and

decisions in ways that preserve their positive self-concept and protect them from feeling bad. These tactics include biased information search and evaluation, selective recall and forgetting, emotional hedging, propitious justifications, and self-serving attribution (for reviews, see Kunda 1990; Campbell and Sedikides 1999). In this research, we move beyond reactive motivated *reasoning* and focus on proactive motivated *situation engineering*, designed to enable motivated reasoning later on. Specifically, we show that consumers strategically choose to have someone else serve them unhealthy foods in order to outsource responsibility for their indulging. To the best of our knowledge, this represents the first demonstration of consumers proactively manipulating their social context to facilitate motivated reasoning.

THEORETICAL BACKGROUND

Be it deciding to spend money now or save it for later (Mishra et al. 2013), choosing between hedonic and utilitarian goods (Dhar and Wertenbroch 2000; Okada 2005), or selecting between indulgent unhealthy foods and abstemious healthy foods (Liu et al. 2015), people are confronted with vice-virtue conflicts. While selecting vice options naturally brings about positive affect, the notion of having made a self-indulgent choice despite known future costs often causes

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consumers to feel poorly afterward (Khan and Dhar 2006; Ramanathan and Williams 2007; Chen and Sengupta 2014).

To the extent that these conflicted choices threaten to compromise people's positive self-view, consumers attempt to resolve such uncomfortable vice-virtue conflicts with the help of self-protecting motivated reasoning strategies. For instance, if there is sufficient ambiguity around how to categorize consumption, people leverage this fuzziness to classify their spending as being more reasonable (Cheema and Soman 2006). Similarly, consumers may preserve an ambivalent attitude toward choices with mixed emotional outcomes to avoid cognitive dissonance between their goals and outcomes (Reich and Wheeler 2016). Consumers also draw on justifications to defend their choice of a vice if the context presents viable excuses (Okada 2005; Mishra and Mishra 2011; Keinan, Kivetz, and Netzer 2016) and justify it based on previous virtuous decisions (Khan and Dhar 2006; Mukhopadhyay and Johar 2009; de Witt Huberts, Evers, and de Ridders 2014). If both the context and their prior behavior fail to offer up suitable excuses, people even distort their memories of prior consumption (Effron, Moinin, and Miller 2013; May and Irmak 2014).

Reactive Search versus Proactive Engineering of Opportunities for Motivated Reasoning

Notably, these tactics are all rather reactive in nature—people spontaneously draw upon incidentally available aspects of the situation to make themselves feel better about indulging. For example, when a consumer is confronted with the repeated opportunity to have a cookie or plain fat-free yogurt, she may draw on both the reality of having chosen the fat-free yogurt previously (Khan and Dhar 2006) and even the mere possibility of choosing the fat-free yogurt next time (Khan and Dhar 2007) to self-license to choose the indulgent cookie now. Similarly, people may use a (negligible) utilitarian feature built into a luxury good as a “functional alibi” to defend the choice of such an indulgent item (Keinan et al. 2016), and they may refer to the presence of a promotional incentive (Mishra and Mishra 2011) or the absence of a more virtuous alternative (Okada 2005) as excuses to justify their indulgent purchases. And when a friend is choosing for people, they may voice greater preference for indulgent options, presumably because the friend being the agent relieves them of responsibility (Okada 2005).

In each of these examples, people use aspects of the situation that happen to be present for the purpose of motivated reasoning (e.g., marketer-designed features of product, promotion, or assortment). This begs an important question:

do consumers only *reactively* respond to opportunities for such motivated reasoning, taking advantage of them when they present themselves naturally? We propose that, rather than merely making mental justifications for indulgence based on incidental situational factors, consumers *proactively* alter their behavior before consumption and strategically engineer situations in ways that facilitate such motivated reasoning. We provide evidence for this assertion, showing one way in which consumers tactically pave a path for themselves that allows remorse-free indulgence: manufacturing the opportunity to deny responsibility by having someone else serve them (vs. serving themselves).

The Value of Outsourcing Responsibility

Prior research links delegating choices and decreased feelings of responsibility. For instance, for difficult decisions, people prefer to delegate choice to someone else (Leonhardt, Keller, and Pechmann 2011; Steffel, Williams, and Perrmann-Graham 2016; Steffel and Williams 2017). Delegating decisions to avoid responsibility appears to be effective: principals who delegate difficult decisions not only feel better themselves (Botti, Orfali, and Iyengar 2009) but are (at least under many circumstances) judged less harshly for negative consequences, compared to those who decided themselves (Paharia et al. 2009; Bartling and Fischbacher 2012). These findings suggest that consumers may have an intuition that delegating choices frees them of responsibility. Recent research in the food consumption domain suggests that when people are less actively involved in obtaining a food, they feel less responsible for consuming it. Specifically, Hagen, Krishna, and McFerran (2017) found that when food is preportioned (vs. when they portion it themselves) people are more likely to choose unhealthy food instead of foregoing it, and also choose larger portion sizes of unhealthy foods. They show that these effects occur because people attribute less responsibility to themselves when they are less actively involved in handling the food.

These results indicate that consumers use the fact that someone else is serving them food to make mental justifications (i.e., they deny responsibility) in order to reduce negative feelings associated with consuming unhealthy food. However, do consumers strategically seek out others to serve them when consuming unhealthy foods, with the intuition that less active involvement in serving food will make them feel less responsible for that food, so that they are able to mentally justify denying responsibility? That is the question we ask here. If consumers indeed prefer to be served by others (vs. serving themselves) for unhealthy

foods—and that this preference exists for unhealthy but not healthy foods—it would be evidence that consumers proactively change their behavior and engineer their social context in order to justify making indulgent choices.

Note that in contrast to the research on reactive mental justification of indulgent behavior based on incidental situational factors (e.g., Okada 2005; Mukhopadhyay and Johar 2009; Keinan et al. 2016), or delegating choices to avoid responsibility (e.g., Botti et al. 2009), we test whether people engage in proactive delegation of behavior to avoid responsibility (outsourcing food serving to someone else, despite making the food choice), to engineer the situational factors that enable motivated reasoning in the first place.

Based on the research discussed, we propose that consumers have a lay theory that being served by someone else will allow them to absolve themselves of (some) responsibility, and that lower responsibility, in turn, will protect them from feeling bad for indulging. Based on this belief, they engineer social situations accordingly in order to facilitate indulgent consumption goals.

Such an account implies four hypotheses:

H1: People anticipate that they will experience negative self-conscious affect as a result of indulgent eating.

H2: This anticipated negative self-conscious affect increases their motivation to reject responsibility for unhealthy food (compared to healthy food) prior to deciding who should serve said food.

H3: People will be relatively more likely to choose being served (instead of serving themselves) for unhealthy food (compared to healthy food) when given the option to do so.

H4: Anticipated negative self-conscious affect and motivation to reject responsibility (serially) mediate the effect of food's healthiness on server preference.

PILOT STUDY: ANTICIPATED NEGATIVE AFFECT SPURS MOTIVATION TO OUTSOURCE RESPONSIBILITY

The pilot study tests the basic premise that people indeed anticipate stronger negative self-conscious affect for unhealthy eating (hypothesis 1), and that they are, as a result, more motivated to reject responsibility for such indulgences (hypothesis 2), compared to healthy eating.

Method

Participants. Three hundred and one US participants were recruited through Amazon Mechanical Turk (49.8% women; $M_{\text{age}} = 34.28$, range = 18–84) for nominal payment.

Procedure. Participants completed the study on their personal computers and were randomly assigned to a 2 (healthiness: healthy vs. unhealthy) \times 5 (food type) between-subjects design. We used five food types—appetizer, side dish, two desserts, snack—instead of just one for purposes of generality; we did not expect any difference in results across the food types (confirmed later in the study). Participants were told they would rate their opinion about a particular food. Those assigned to the healthy (unhealthy) condition were presented with the following foods: crunchy vegetables with yogurt dip (fried calamari with mayo dip) in the appetizer condition; steamed spinach (macaroni and cheese) in the side dish condition; fruit salad (chocolate cake) in the first dessert condition; yogurt (ice cream) in the second dessert condition; and raw nuts (M&Ms) in the snack condition.

Participants answered questions regarding their motivation to reject responsibility and anticipated negative affect, as well as healthiness perception of the foods (as a manipulation check) and demographics.

Measures. *Motivation to Reject Responsibility.* Participants rated their agreement with two items: “For this food, I would probably look for excuses allowing me to eat it” and “For this food, it'd be better if other circumstances were responsible for why I ate this food” on slider scales from 0 = “strongly disagree” to 100 = “strongly agree.” The two items were combined into a “motivation to reject responsibility” index ($\alpha = .63$).

Anticipated Negative Self-Conscious Affect. Participants subsequently rated to what extent they would feel guilty, ashamed, and regretful (Ramanathan and Williams 2007; see also Hagen et al. 2017; Krishna and Hagen 2019) on slider scales from 0 = “would not feel this way at all” to 100 = “would very much feel this way.” These three items were combined into an “anticipated negative self-conscious affect” index ($\alpha = .93$).

Manipulation Check (Perceived Healthiness). Finally, respondents rated how healthy they found the food options, on a 0–6 scale, before reporting demographics.

Results and Discussion

We conducted univariate GLM with healthiness and food type as the independent variables, and the motivation to

reject responsibility index, the anticipated negative affect index, and the perceived healthiness rating as the dependent variables, respectively. Results are depicted in figure 1.

Manipulation Check (Perceived Healthiness). There was a main effect for healthiness of the food ($F(1, 291) = 293.01, p < .001$). As intended, the food was perceived as significantly healthier in the healthy conditions ($M = 4.84$, standard deviation (SD) = 1.19) than in the unhealthy conditions ($M = 1.87$, SD = 1.83). There was an incidental main effect of food type ($F(4, 291) = 4.22, p = .002$). There was no interaction between healthiness of the food and food type ($F(4, 291) = .98, p = .418$). For all five food types, the food in the healthy condition was rated healthier than that in the unhealthy condition (all $F > 46$, all $p < .001$), that is, the manipulation worked for all food types.

Motivation to Reject Responsibility. There was only a main effect for healthiness of the food ($F(1, 291) = 11.05, p = .001$). As predicted, people reported greater motivation to reject responsibility for an unhealthy food ($M = 45.35$, SD = 28.31) than for a healthy food ($M = 34.58$, SD = 26.66). There was no main effect of food type ($F(4, 291) = .09, p = .987$) and no interaction between healthiness and food type ($F(4, 291) = 1.27, p = .280$). These results support hypothesis 2.

Anticipated Negative Self-Conscious Affect. Just as for motivation to reject responsibility, there was only a main effect for healthiness of the food ($F(1, 291) = 50.40, p < .001$). As predicted, people anticipated stronger negative self-conscious affect for an unhealthy food ($M = 37.67$,

SD = 31.48) than for a healthy food ($M = 15.41$, SD = 22.05). There was no main effect of food type ($F(4, 291) = .70, p = .591$) and no interaction between healthiness and food type ($F(4, 291) = 1.90, p = .110$). These results support hypothesis 1.

Mediation. We tested a mediation model in which anticipated negative self-conscious affect mediates the effects of food's healthiness on motivation to reject responsibility. The unhealthy condition was coded as 1, the healthy condition as 0. Bootstrap analysis with 10,000 samples indicated that anticipated negative self-conscious affect mediated the observed effect ($B = 11.67$, standard error (SE) = 1.95; 95% confidence interval (CI) = 8.23 to 15.89).

These results match the idea that people seek to rid themselves of responsibility for unhealthy eating because they fear feeling bad about it (hypotheses 1 and 2). Having established this premise, study 1 examines people's server preferences in situations of healthy and unhealthy eating, testing if consumers manipulate social contexts to justify vice consumption.

STUDY 1: SERVER CHOICE FOR HEALTHY AND UNHEALTHY BEVERAGES IN THE FIELD

Study 1 tests whether consumers have a relative preference for being served (instead of serving themselves) to a greater extent for unhealthy foods than for healthy foods (hypothesis 3) by assessing server choice in a field setting. This study uses a context where the choice of one's server (self or other) is up to consumers; that is, options for both serving oneself and taking a preserved portion are available side by side.

Method

Participants. For this field study, we sponsored beverages to be offered in mentoring seminars of the Undergraduate Research Opportunity Program (UROP) at the University of Michigan. We conducted our study in three seminar groups, with a total of 94 unique freshmen.

Design. In each seminar group, we offered either two healthy beverages (unsweetened almond milk and a probiotic blueberry-açaí drink) or two unhealthy beverages (chocolate milk and pumpkin eggnog). Participants could choose one of the two attractive beverages that we offered them. The two beverages were pretested to be either unhealthy or healthy (discussed below). Using two attractive flavors in each condition (healthy or unhealthy) was designed to decrease the likelihood that participants would opt out of drink-

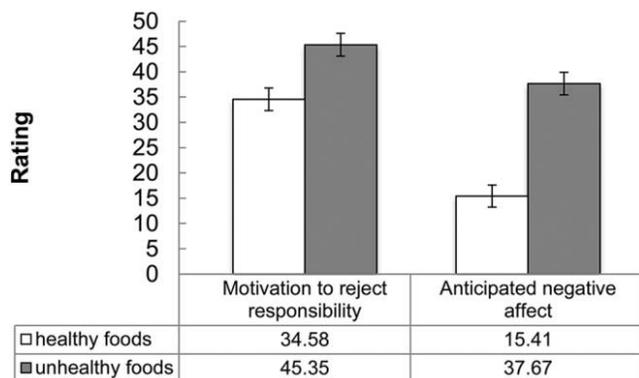


Figure 1. Results for both dependent variables by healthiness of the food in the pilot study. Error bars represent ±1 SE.

ing entirely. Further, participants could choose between pouring their own drink or taking a cup that had already been poured. Thus, we had a one-factor (healthiness: healthy vs. unhealthy) between-subjects design, where participants chose one of two drinks but, more crucially, also decided whether to pour themselves the beverage (self-serve) or to pick up a pre-served beverage (other-served).

Pretest (Perceived Healthiness). In a pretest, 66 participants from the same university had rated one of various drinks' healthiness on a 1–7 scale. There was a main effect of beverage ($F(3, 62) = 14.39, p < .001$). Students viewed the almond milk ($M = 4.94, SD = 1.21$) and the blueberry drink ($M = 5.07, SD = 1.62$) as equally healthy ($p = .994$); chocolate milk ($M = 3.33, SD = 1.09$) and pumpkin eggnog ($M = 2.47, SD = 1.40$) as equally unhealthy ($p = .254$); and, critically, the healthy beverages as healthier than the unhealthy beverages ($p < .001$).

Procedure. Both conditions were run in the late afternoon. Once all students enrolled in the seminar had entered the room and settled into their seats for the class, the seminar instructor announced that the UROP program had sent some treats their way—beverages—and that they could feel free to take a cup or pour themselves one if they would like. In each condition, the two beverage flavors were both available pre-served and for serving oneself. Specifically, prior to any students entering the room, on a buffet-type table, we had placed 15 8-oz clear plastic cups of each flavor (almond milk and blueberry drink in the healthy condition; chocolate milk and pumpkin eggnog in the unhealthy condition), each pre-filled halfway up (Hagen et al. 2017), as well as multiple large beverage containers of each flavor and stacks of empty cups for serving oneself. The cups being filled halfway up (instead of entirely full) minimized the chance that people would systematically choose serving themselves (as opposed to taking the pre-filled cup) purely because they wanted less than what the pre-filled cup contained, which would have contaminated the number of people choosing to serve themselves.

This set comprised all of the beverage options present for the duration of data collection (i.e., no materials were replenished over the course of the seminar). While no researchers were present during the actual seminar, a research assistant entered the room at the end of each session to observe the number of pre-filled and empty serve-yourself cups remaining on the buffet table.

Measure. The critical dependent measure at the end of each seminar was the number of cups taken from the set of pre-filled cups and the set of empty serve-yourself cups, indicating how many of those who had a drink chose to be served (as opposed to serving themselves).

Results and Discussion

We conducted a chi-square test on the server choice data. Results are depicted in figure 2. Six seminar attendees did not take a beverage,¹ leaving 88 data points for the analysis.

Server Choice. There was a significant relationship between healthiness condition and server choice, $\chi^2(1, N = 88) = 30.34, p < .001$. Specifically, for the unhealthy beverages, 96.2% (50 out of 52) took the pre-served cups, and only 3.8% (2 out of 52) opted to serve themselves a drink into an empty cup. As predicted, people were significantly more likely to choose the drink that was already served for them than to take the opportunity to serve themselves, $\chi^2(1, N = 52) = 44.31, p < .001$. For the healthy beverages, however, 44.4% (16 out of 36) took the pre-served cups, but 55.6% (20 out of 36) opted to serve themselves a drink into an empty cup. As predicted, this difference was not significant; people were similarly likely to choose the pre-served drink or the opportunity to serve themselves, $\chi^2(1, N = 36) = .44, p = .505$.

These field study results support the hypothesis that consumers prefer to be served when they consume unhealthy foods and beverages (hypothesis 3) and that they seek opportunities to do so. The results are also consistent with the idea that consumers want to prevent feeling bad for indulging and therefore strategically seek to push off responsibility for unhealthy choices (hypotheses 1 and 2). Yet these data are limited due to their aggregate nature, and process can only be inferred. Study 2 begins to examine the hypoth-

1. There was a significant relationship between healthiness condition and propensity to forego the beverages altogether $\chi^2(1, N = 94) = 3.98, p = .046$. Specifically, while for the unhealthy beverages, 10.34% (6 out of 58) did not take any beverage at all, for the healthy beverages, 0.00% (0 out of 36) did not take any beverage. Among students taking a beverage, there were no clear flavor preferences. In the unhealthy condition, people were indifferent between the two beverage flavors, $\chi^2(1, N = 52) = 1.23, p = .267$, with 57.69% (30 out of 52) choosing the pumpkin eggnog and 42.31% (22 out of 52) choosing the chocolate milk. In the healthy condition, people marginally favored one flavor, $\chi^2(1, N = 36) = 2.78, p = .096$, with 63.89% (23 out of 36) choosing the blueberry drink and 36.11% (13 out of 36) choosing the almond milk.

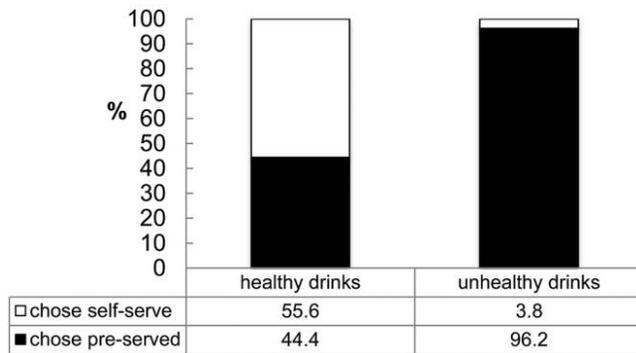


Figure 2. Choice share for each server type by healthiness of the drink in study 1. For the healthy drinks, people were indifferent between the preserved and self-serve options. However, for the unhealthy drinks, people significantly preferred the pre-served option over the self-serve option.

sized processes—that is, if anticipated negative self-conscious affect (hypothesis 1) is a key driver of the effect—by moderation.

STUDY 2: REMOVING ANTICIPATED GUILT FOR INDULGENCE ELIMINATES THE PREFERENCE FOR BEING SERVED

Study 2 begins to examine the role of anticipated negative self-conscious affect in people’s preference to be served unhealthy foods. This study tests for a moderation effect: if anticipated negative self-conscious affect is a key driver for why people more strongly prefer being served by someone else when food is unhealthy than when it is healthy (hypothesis 1), then removing this anticipated negative affect should likewise remove the effect. Study 2 also further probes if expectations about how much another person would serve drive server preferences. For example, if people expect others would serve them less than they would themselves, delegation may rather function as a form of outsourcing self-control (not responsibility). Conversely, if they expect others would serve them more than they would themselves, delegation may just be a tool to increase indulgent consumption (not to regulate negative affect).

Method

Participants. For this online experiment, 607 US participants were recruited through Prolific Academic (51.7% women; $M_{age} = 32.75$, range = 18–78; three participants did not report demographics) for nominal payment.

Procedure. Participants completed the study on their personal computer and were randomly assigned to a three-group

(healthy vs. unhealthy vs. unhealthy + no guilt) between-subjects design. They envisioned the following: “Imagine you are at an event where you eat dinner. After dinner, there are two options available. Which one would you choose?” People in the healthy (unhealthy) condition(s) read that their options were grilled peaches or fruit salad (New York cheesecake or chocolate cake). After indicating their dessert choice, they responded to an item about their preference regarding who should serve the food (self or other).

People in the unhealthy + no guilt condition received additional scenario information designed to minimize their anticipated guilt before they made their server choice. Specifically, they read: “Fortunately, you have been great about exercising and eating today, so you are still far below your calorie budget for the day. Eating this food will definitely NOT cause you to go over your calorie goal, and you’ll have no reason to feel guilty at all.”

Pretest (Anticipated Negative Self-Conscious Affect). A pretest on this manipulation was conducted with 120 US participants from Amazon Mechanical Turk (47.5% women; $M_{age} = 34.76$, range = 20–68) to ensure that it indeed induces stronger anticipated negative affect in the unhealthy food condition compared to both the healthy and the unhealthy + no guilt condition. Participants were randomly assigned to one of the three conditions and completed the same “anticipated negative self-conscious affect” index ($\alpha = .93$) as in the pilot study. There was a main effect of condition ($F(2, 117) = 4.66$, $p = .011$). Follow-up contrasts indicated that, as intended, people anticipated stronger negative self-conscious affect in the unhealthy condition ($M = 32.88$, $SD = 27.37$) than in the healthy ($M = 17.27$, $SD = 28.14$; $t(117) = -2.649$, $p = .009$) and the unhealthy + no guilt condition ($M = 17.33$, $SD = 23.29$; $t(117) = -2.638$, $p = .009$). There was no difference in anticipated negative self-conscious affect between the healthy and the unhealthy + no guilt conditions ($t(117) = -.011$, $p = .991$).

After respondents indicated their preference for who should serve the food, they also answered questions regarding what amount they believed another person would serve them, as well as healthiness perception of the foods (as a manipulation check) and demographics.

Measures. *Server Preference.* Participants indicated their preference for who should serve the peaches/fruit salad (cheesecake/chocolate cake) by responding to the question: “If you want to enjoy the experience of eating this food as much as possible, what would you prefer—if someone

serves you or if you serve yourself?” on a slider scale ranging from “I prefer serving myself” to “I prefer another person serving me,” without numerical anchors.

Expected Other-Served Amount. Next, participants reported their expectation of the amount of the food in question another person would serve them: “If someone else were to serve you a portion of this food, what would you expect: that the other person would serve you a larger portion than you would yourself, or a smaller portion than you would yourself?” on a slider scale ranging from “Much LESS than I would serve myself” to “Much MORE than I would serve myself,” the center of the line being “SAME amount,” without numerical anchors.

Manipulation Check (Perceived Healthiness). Finally, respondents rated how healthy they found the food options, on a 0–6 scale, before reporting demographics.

Results and Discussion

We conducted one-way ANOVAs with condition as the independent variable and healthiness rating, the serving preference rating, and the expected other-served amount as the dependent variables, followed by planned linear contrasts. Results are depicted in figure 3.

Manipulation Check (Perceived Healthiness). There was a main effect of condition ($F(2, 601) = 346.87, p < .001$). As intended, the food was perceived as significantly healthier in the healthy condition ($M = 4.16, SD = 1.71$) than in the unhealthy condition ($M = .96, SD = 1.17; t(355.46) = 22.03, p < .001$) and the unhealthy + no guilt condition ($M = 1.21, SD = 1.13; t(348.17) = 20.52, p < .001$).

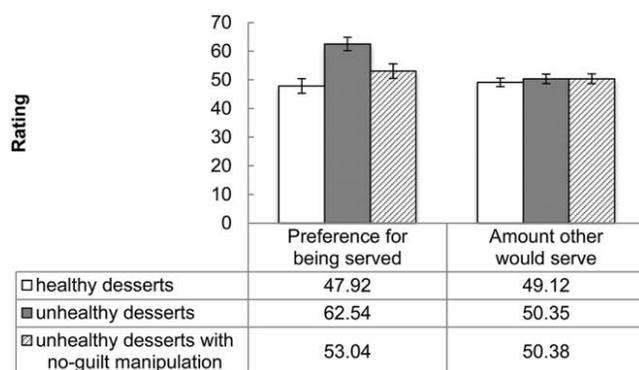


Figure 3. Results for both dependent variables by condition in study 2. For the “Amount other would serve” variable, 50 represents the belief another person would serve the same amount as oneself would. Error bars represent ± 1 SE.

Server Preference. Responses to the server preference item were recorded as 0 = “I prefer serving myself” to 100 = “I prefer another person serving me,” so higher values indicate a stronger preference for being served by someone else. There was a main effect of condition on preference for who should serve the food ($F(2, 604) = 8.93, p < .001$). People’s preference for being served by someone else was significantly higher for the unhealthy condition ($M = 62.54, SD = 33.52$) compared to the healthy condition ($M = 47.92, SD = 36.23; t(400.90) = 4.22, p < .001$) and also compared to the unhealthy + no guilt condition ($M = 53.04, SD = 36.18; t(399.68) = 2.74, p = .006$). However, there was no significant difference in preference for being served between the healthy and unhealthy + no guilt conditions ($t(402.99) = 1.42, p = .155$). This result supports hypotheses 1 and 3.

Note also that people’s preference for being served was significantly greater than the midpoint of the scale (which represents indifference) for the unhealthy condition ($t(201) = 5.32, p < .001$) but was indistinguishable from the midpoint of the scale for the healthy condition ($t(202) = -.82, p = .415$) and the unhealthy + no guilt condition ($t(201) = 1.20, p = .233$).

Expected Other-Served Amount. Responses to the expected other-served amount item were recorded as 0 = “much LESS than I would serve myself” to 100 = “much MORE than I would serve myself,” with 50 = “SAME amount,” so higher values indicate a larger expected other-served amount. The analysis revealed no effect of condition on expectation ($F(1, 604) = .19, p = .825$). The expected other-served amount was virtually the same in the unhealthy condition ($M = 50.35, SD = 24.17$) as in the healthy condition ($M = 49.12, SD = 21.17; t(395.62) = .55, p = .585$) and the unhealthy + no guilt condition ($M = 50.38, SD = 24.50; t(401.92) = .01, p = .992$).

Note also that expected amounts were indistinguishable from the midpoint of the scale (which represents the same amount as people would serve themselves) in all three conditions (all $p \geq .55$). These results speak against the idea that speculations about how much someone else would serve are the reason for people’s preference for who should serve food.

The result that preference for being served was greater for the unhealthy than the healthy condition conceptually replicates the result of study 1 and supports hypothesis 3. The result that preference for being served was significantly reduced for the unhealthy + no guilt condition down to the level of the healthy condition is in line with the idea that anticipated negative self-conscious affect is a key driver of

server preference and supports hypothesis 1. By extension, this result also suggests that even a simple and fairly subtle manipulation such as “still having room” in one’s calorie budget can be a rather effective guilt reliever. This notion dovetails with research showing that consumers often squander any calorie deficits they have achieved by rewarding themselves, thereby undermining their weight loss progress (see McFerran and Mukhopadhyay 2013).

Given that anticipated affect was manipulated rather than measured, this finding also rules out that anticipated affect ratings are merely a downstream consequence of server preference ratings. The final study tests all of our hypotheses concurrently.

STUDY 3: ANTICIPATED NEGATIVE AFFECT AND MOTIVATION TO OUTSOURCE RESPONSIBILITY DRIVE SERVER PREFERENCES

Study 3 tests whether consumers more strongly prefer to be served by someone else when the food is unhealthy versus when it is healthy (hypothesis 3) because they anticipate stronger negative affect if they were to serve themselves (hypothesis 1) and are thus more motivated to reject responsibility for unhealthy food than for healthy food (hypothesis 2) via serial mediation (hypothesis 4).

Method

Participants. For this online experiment, 199 US participants were recruited through Amazon Mechanical Turk (38.2% women; $M_{age} = 34.43$, range = 18–73) for nominal payment.

Procedure. Participants completed the study on their personal computer and were randomly assigned to a one-factor (healthiness: healthy vs. unhealthy) between-subjects design. They envisioned the following: “Imagine you are at an event where you eat dinner. After dinner, there are two options available. Which one would you choose?” The type of event was not further specified, that is, participants could imagine any kind of event where dinner and dessert are offered. People in the healthy (unhealthy) condition read that their options were grilled peaches or fruit salad (New York cheesecake or chocolate cake).

After indicating their dessert choice, they responded to an item about their preference regarding who should serve the food (self or other). Then they answered questions regarding their motivation to reject responsibility and antic-

ipated negative self-conscious affect (in counterbalanced order), as well as healthiness perception of the foods (as a manipulation check) and demographics.

Measures. *Server Preference.* Participants indicated their preference for who should serve the peaches/fruit salad (cheesecake/chocolate cake) by responding to the same server preference question as in study 2.

Motivation to Reject Responsibility. Participants rated the same “motivation to reject responsibility” items ($\alpha = .75$) as in the pilot study.

Anticipated Negative Self-Conscious Affect. Participants rated the same “anticipated negative self-conscious affect” items ($\alpha = .96$) as in the pilot study.

Manipulation Check (Perceived Healthiness). Finally, respondents rated how healthy they found the food options on a 0–6 scale, before reporting demographics.

Results and Discussion

We conducted one-way ANOVAs with healthiness as the independent variable and healthiness rating, the serving preference rating, the motivation to reject responsibility index, and the anticipated negative affect index as the dependent variables, respectively. Results are depicted in figure 4.

Manipulation Check (Perceived Healthiness). There was a main effect for healthiness of the food ($F(1,197) = 156.18$, $p < .001$). As intended, the food was perceived as significantly healthier in the healthy condition ($M = 4.74$, $SD = 1.00$) than in the unhealthy condition ($M = 1.92$, $SD = 1.97$).

Server Preference. Responses to the server preference item were recorded as 0 = “I prefer serving myself” to 100 = “I

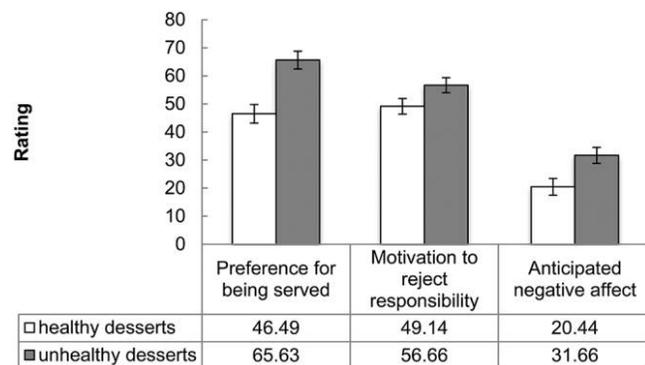


Figure 4. Results for all three dependent variables by healthiness of the food in study 3. Error bars represent ±1 SE.

prefer another person serving me,” so that higher values indicate a stronger preference for being served by someone else. The analysis revealed a main effect of food’s healthiness on preference for who should serve the food ($F(1, 197) = 17.46, p < .001$). People’s preference for being served by someone else was higher for the unhealthy food ($M = 65.63, SD = 30.62$) than for the healthy food ($M = 46.49, SD = 33.96$). This result supports hypothesis 3.

Note also that people’s preference for being served was significantly greater than the midpoint of the scale (indifference) for the unhealthy food ($t(103) = 5.20, p < .001$) but was indistinguishable from the midpoint of the scale for the healthy food ($t(94) = -1.01, p = .317$).

Motivation to Reject Responsibility. The analysis revealed a marginal main effect of food’s healthiness on people’s motivation to reject responsibility ($F(1, 197) = 3.80, p = .053$). People were slightly more motivated to reject responsibility for the unhealthy food ($M = 56.66, SD = 27.10$) than for the healthy food ($M = 49.14, SD = 27.31$). This result supports hypothesis 2.

Anticipated Negative Self-Conscious Affect. The analysis revealed a main effect of food’s healthiness on anticipated negative affect ($F(1, 197) = 7.46, p = .007$). People anticipated significantly greater negative affect for the unhealthy food ($M = 31.66, SD = 29.81$) than for the healthy food ($M = 20.44, SD = 27.96$). This result corroborates hypothesis 1.

Mediation. We tested a serial mediation model in which anticipated negative affect and motivation to reject responsibility sequentially drive the effect of food’s healthiness on the preference for who should serve it. The unhealthy condition was coded as 1, the healthy condition as 0. Bootstrap analysis with 10,000 samples indicated that motivation to reject responsibility mediated the observed effect ($B = .85, SE = .49; 95\% CI = .16$ to 2.23). Importantly, alternative models did not fit the data (e.g., flipped order of the mediators: $95\% CI = -.02$ to 1.42 ; anticipated negative affect as an outcome of server preference rather than a mediator: $95\% CI = -.01$ to $.90$), supporting hypothesis 4.

These results align with our strategic outsourcing of responsibility account. People’s preference for being served (as opposed to serving themselves) is enhanced for unhealthy food compared to healthy food (hypothesis 3), and the drivers of this effect are heightened anticipated negative self-

conscious affect (hypothesis 1) which spurs a motivation to reject responsibility for consumption (hypotheses 2 and 4). The findings also reemphasize that people attempt to rid themselves of responsibility, via outsourcing food serving to someone else, despite already having chosen the food themselves.

GENERAL DISCUSSION

Together, four studies provide support for the idea that people proactively, and strategically, manipulate their context in order to be able to justify their indulgences later on, even employing others to aid in this pursuit. While prior research has focused on reactive mental justification of indulgent behavior (e.g., Okada 2005; Khan and Dhar 2007) and delegation of choices to avoid responsibility (e.g., Botti et al. 2009), we focus on preemptive delegation of behavior to avoid responsibility. In our studies, participants preferred being served unhealthy foods by someone else (even though the food they consumed remained the same).

Our results bring an important novel insight to the literature on motivated reasoning, suggesting that consumers may preemptively engage in motivated engineering of the situation with the goal of enabling motivated reasoning later on. Research on self-control has documented examples of consumers’ strategic behavior in the present to ensure self-control in the future, such as the use of self-rationing of vices (Wertenbroch 1998) or incentives for virtuous behavior (Schwartz et al. 2014). However, the study of motivated reasoning—mental processes that are arguably often in opposition to self-control—had not yet considered that people may prospectively lay the groundwork for biased reasoning by creating the evidence necessary for it.

This possibility of more general prospective behavior with the strategic intention to enable subsequent motivated reasoning offers exciting potential for future research. For instance, it is conceivable that people deliberately shape their consumption contexts far in advance to create licenses that justify indulging at a later point, such as selecting restaurants that lack healthier alternatives. While we focused on food here, many other indulgent behaviors (e.g., alcohol, drug use) are relevant and practically consequential.

Further, our experiments raise questions about moderators of our effect. For example, some research in the food consumption and self-control literature suggests that restrained eaters engage in more motivated reasoning than unrestrained eaters, such as more strongly overweighting healthy elements of meals (Chernev 2011), applying downward comparison with larger-sized others (McFerran et al.

2010), or using unintended indulgent eating as an excuse to subsequently abandon self-control entirely (Herman and Mack 1975; Herman and Polivy 1983). Other research, however, finds that restrained eaters evaluate food and their consumption more critically than unrestrained eaters, for example, paying more attention to unhealthy-sounding food labels (Irmak, Vallen, and Robinson 2011). A clearer understanding of whether restrained eaters are more likely than unrestrained eaters to outsource responsibility (e.g., because they are more prone to negative eating-related affect) or less likely to act strategically (e.g., because doing so could undermine their restrained eating goals) will improve our recommendations to those consumers most concerned with their eating—namely, dieters.

Moreover, our experiments do not fully clarify to what extent the strategic element of server choice operates outside of people's conscious awareness. Our studies suggest people are aware that relieving themselves of responsibility is helpful in contexts of indulgent consumption. However, it is unclear whether they consciously connect their outsourcing the activity of serving food to another person to their own sense of responsibility. This question warrants further study.

Clearly, there is much more to be learned about how consumers can strategically engineer their consumption context to facilitate indulgent consumption, yet reduce their guilt in doing so, and who is most likely to use these tactics. This research is just a beginning and suggests many opportunities for follow-up research.

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