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Citation: Paley, A., Scopelliti, I. & Steinmetz, J. (2025). Wait or Eat? Self-Other Differences in a Commonly Held Food Norm. *Appetite*, 212, 108021. doi: 10.1016/j.appet.2025.108021

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Link to published version: <https://doi.org/10.1016/j.appet.2025.108021>

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Abstract

This research examines a widespread food norm: waiting to eat until everyone in a dining party has received their food. Six experiments (total N = 1,907) examine how individuals perceive and respond to this norm and reveal a consistent self-other difference in anticipated norm adherence. Participants reported greater expected norm adherence from themselves compared to others (Studies 1a, 2a, 3-4). This self-other difference is driven by a differential perception of the psychological costs and benefits of eating immediately versus waiting, which are more pronounced for the self than for others (Studies 2a-2b). We tested two interventions targeting this difference: taking the other person's perspective partially reduced, but did not eliminate, the self-other difference (Study 3), while explicit encouragement from a dining companion to break the norm and begin eating, intended to remove social constraints, had no significant effect on the self-other difference (Study 4). These findings extend our understanding of food norms by demonstrating that the perceived psychological utility of norm adherence varies systematically between self and others.

Keywords: Food norms; Self-other difference; Food consumption; Norm utility; Norm adherence; Perspective-taking

1. Introduction

You have probably experienced the following situation: You were out to dinner with an acquaintance, and your food was served before theirs. Although you might have been hungry and your food was getting cold, you probably waited to eat until their food arrived as well. If you recognize yourself in this description, you are not alone. In fact, we conducted a pilot study that confirmed the prevalence of the norm of waiting to eat until others have their food, using a preregistered survey of 625 individuals from 91 different countries. Ninety-one percent of these individuals reported that in their country of origin it is expected that the person with the food delays consumption until others are served.

Interestingly, when roles are reversed, many people encourage their dining companions whose food has arrived first to begin eating immediately, rather than waiting. This desire for one's companion to violate a widely recognized norm is an intriguing anomaly. People tend to follow norms when eating in the presence of other people (Robinson et al., 2014) and adapt the quantity and the types of food consumed accordingly. Following food norms has several important functions (Higgs, 2015). For one, showing normative behavior leads to increased social cohesion. For another, normative behavior also provides information on what foods in what amounts are appropriate to eat in a given situation (Herman & Polivy, 2005; Herman et al., 2003; Robinson et al., 2014). In combination, these findings suggest that norm adherence should be expected and prescribed both for the self and for others, such that both parties would wait to eat.

In contrast, we test whether a self-other difference exists in people's attitudes towards adherence to the norm of waiting to eat. We propose that people will endorse norm adherence to greater extents for themselves compared to others. We further contend this difference is due to

differential access to internal psychological experiences—both the costs of violating the norm (e.g., the discomfort of feeling impolite or of being watched while eating) and the benefits of adhering to it (e.g., appearing considerate or avoiding social discomfort). Since these psychological experiences occur internally and thus are not accessible to others, people have much more insight into their own experiences, compared to others'. Consequently, they will endorse their own norm adherence based on the consideration of these internal states, but will perceive less justification to do so for others to follow the same norm. We further examine whether this difference can be reduced through two different interventions: taking the perspective of the other party to increase access to their internal states, and an explicit norm release that removes the social obligation to wait, in the form of encouragement from a dining companion to begin eating.

2. Conceptual Framework

Social norms are integral to understanding human behavior (Bicchieri, 2006). These informal rules facilitate harmonious interactions by establishing expectations and reducing uncertainties in social exchanges (Cialdini & Trost, 1998). Extensive research in the social sciences has delved into the study of social norms, showing that people internalize them and adhere to them to facilitate social order and cohesion (Gavrilets & Richerson, 2017), that normative behavior often becomes automatic and hard-wired (Eriksson et al., 2015; Morris et al., 2015; Peysakhovich & Rand, 2016), and that norm violations are typically perceived negatively and even punished (Gelfand et al., 2024). In fact, people are willing to pay with their own resources to punish norm violators, even when they themselves are not harmed by the norm violation (Fehr & Fischbacher, 2004). Consequently, people favor institutions that enforce social norms and sanction norm violation (Fehr & Schurtenberger, 2018).

Since eating is such an integral part of social life and much food consumption occurs in social contexts (Rozin, 1996), it is not surprising that social norms also govern much of people's behavior around food consumption (Higgs & Ruddock, 2020). People consistently adjust their food choices and eating behavior to align with social norms (Cruwys et al., 2015; Herman et al., 2003; 2019; Robinson et al., 2014), because doing so makes them feel more socially accepted and signals they are behaving in appropriate ways (Higgs, 2015). The tendency towards conformity is particularly strong because norm violations are generally perceived negatively, particularly when norms are pervasive and there is little uncertainty around the prescribed behavior (Morgan et al., 2012), like in the case of eating.

Taking into account the social benefits provided by norm adherence in general and norm adherence to food norms in particular, individuals might form rational expectations about others' norm adherence and think that others should follow norms to a similar extent as themselves. Since norms provide information about what is appropriate eating behavior (Higgs, 2015; Higgs & Ruddock, 2020; Herman & Polivy, 2005; McFerran et al., 2010; Roth et al., 2001), behaving normatively should provide equal utility to the self and others. If self-other differences exist in norm adherence expectations, prior research on social norms would suggest that people might expect others to follow food norms more so than they should do, as people tend to overestimate others' endorsement of certain social norms (Miller & Prentice, 2016; Prentice & Miller, 1993). Therefore, they might believe that others attribute greater importance to food norm adherence than they themselves do, and should consequently be more likely to follow them.

Building on this research, this paper examines whether self-other differences exist regarding preferred adherence to a prevalent food norm. Past research has shown that food norms have a powerful influence on choices and behaviors regarding food quantity and food

92 stereotypicality (Herman & Polivy, 2005; Higgs & Ruddock, 2020; McFerran et al., 2010).

93 However, what has been explored to much lesser extents are people's attitudes towards such
94 norms, and whether these attitudes differ when applied to oneself versus others.

95 We consider the norm of waiting to eat until everyone at the table has received their food
96 and propose that self-other differences in attitudes towards adherence to this norm might exist.
97 Specifically, we propose that people consistently believe they themselves should adhere to the
98 norm to a greater extent compared to others. We expect that this difference emerges because the
99 benefits of norm adherence are mainly experienced internally by the person facing the decision
100 to wait or eat. For example, they get to seem polite and mindful of the shared eating experience,
101 and avoid the discomfort of being observed eating. However, when considering others in the
102 same situation, people may not attribute this same rich array of emotional experiences to their
103 dining companion, leading to different normative expectations for others compared to
104 themselves.

105 Past research provides evidence of such differential access to mental states: people have
106 greater access to their own thoughts and feelings than to those of others (Cooney et al., 2022;
107 Pronin et al., 2002; Ross & Sicoly, 1979), which enables a more comprehensive assessment of
108 the utility of norm adherence for themselves. This differential access to one's own mental states
109 relative to others' leads people to underappreciate others' psychological experiences, for
110 example their psychological needs (Schroeder & Epley, 2020), the frequency and intensity of
111 their thoughts (Cooney et al., 2022), the idiosyncrasy of their preferences (Jung et al., 2020), or
112 their intrinsic motivation (Bohns et al., 2016; Heath, 1999). Similarly, people have difficulty
113 predicting the emotional states of others, particularly when those emotions are different from

their current experience (Nordgren et al., 2011; van Boven & Loewenstein, 2003; van Boven et al., 2005).

Consequently, when forming expectations about others' norm-adherence and the associated utility, people may rely much less on information about others' thoughts and feelings, which are largely inaccessible to them, resulting in an underestimation of both the internal costs and the benefits of adhering to (vs. violating) the norm. The limited accessibility of others' internal experiences is particularly pronounced in the context of the norm of waiting to eat, because in this case the consequences of violation are primarily psychological rather than tangible. When one's dining companion begins to eat before others have their food, there are few observable external consequences: the waiting person's food arrives at the same time regardless, and watching someone eat is not demonstrably worse than seeing an untouched plate of food on the table. Thus, without access to the internal experience of discomfort or awkwardness, people may underestimate both the psychological costs of norm violation and the benefits of adherence for others. The person whose food has arrived might be able to assess both their own internal benefits from waiting (Ruff & Fehr, 2014) and their internal costs from eating (e.g., guilt or shame, Van Kleef et al., 2015, or embarrassment, Bohns & Flynn, 2010). However, they may underestimate both the costs and benefits that others experience when adhering to this food norm, leading to a belief that others should instead violate the norm.

Furthermore, the norm itself provides a sufficient explanation for the observed behavior (i.e., waiting), such that observers might have no reason to consider other psychological motivations for the behavior (e.g., feeling polite, avoid being watched eating). Not only are others' internal states difficult to access, but the existence of the norm makes such access

unnecessary to explain others' behavior. That is, in this context, people may be both unwilling and unable to fully take the perspective of their dining companion.

Taken together, we expect that people believe they themselves should wait until the other person receives their food to a greater extent than they believe others should wait. We further propose that this self-other difference emerges because people have less direct access to the psychological costs and benefits of waiting for others than for themselves. The underestimation of these costs and benefits may reduce the belief that others should adhere to the norm.

In light of this mechanism, we test two possible interventions that might attenuate the self-other difference. First, we investigate whether a perspective taking intervention (i.e., prompting people to explicitly consider what their dining companion might be thinking and feeling) could reduce the self-other difference by making others' internal experiences more accessible. Second, we test whether reducing some of the costs of violating the norm, by having one person explicitly encourage the other to eat, might reduce the self-other difference. If so, the results may be driven by social constraints and people waiting to be "released" from the norm by their dining companion rather than by internal motivations.

3. Current Research

We examine these predictions across six experiments (total N = 1,907). In Studies 1a and 1b, we test whether there is a self-other difference in attitudes towards the norm of waiting to eat. Next, we test our prediction that the differential access to costs and benefits of waiting plays a role through mediation in Study 2a and through moderation in Study 2b. We then apply two interventions that may reduce the self-other difference. Specifically, in Study 3, we ask some participants to explicitly perspective-take on the thoughts and feelings of the other. Lastly, in

Study 4, we test whether explicit encouragement to eat from the person who does not receive food reduces the self-other difference.

All studies used a similar hypothetical scenario where participants were asked to imagine dining with another individual at a restaurant, and one person's food was delivered prior to the others. We randomized whether participants imagined receiving their food first, or imagined their dining companion receiving their food first (exact study materials available in Appendix A). We focus on dyads of diners because for one, a party size of two is very common in restaurant settings and most tables are for two people. For another, larger parties might have different dining rules that determine when it is acceptable to start eating (e.g., Belludi, 2020). Given the hypothetical nature of our studies, to establish the realism of the scenario, we ran a pretest asking participants how realistic, plausible, and familiar the scenario felt to them on three separate 7-point scales (e.g., 1 = *Not at all realistic*, 7 = *Very realistic*). As preregistered, we averaged the three measures ($\alpha = .68$) and used a one -sample t-test against the midpoint of the scale. Results revealed that the scenario was high in realism ($M = 6.09$, $SD = .87$; $t(100) = 24.16$, $p < .001$, $d = 2.40$). This suggests that, despite the hypothetical nature of our studies, the experience we document felt realistic to participants.

All studies received approval by an institutional ethics review board before data collection commenced. All studies were conducted in English, and Studies 1a-4 recruited online participants located in the United States. Studies paid between \$0.24 and \$0.36 and took participants approximately 1-2 minutes to complete. For all studies except for Study 1a (which was part of a larger study and had a larger sample size of 150 participants per condition), we predetermined our sample size to be 100 participants per condition. We did not use a priori sample size calculations to determine this sample size but instead relied on general

recommendations for achieving adequate power in psychological research (e.g., Simmons et al., 2013) recommending a minimum sample size of 50 observation per condition. We at least doubled this minimum sample size in all our studies to be able to reliably detect our expected effect even in potentially noisier online studies. Recruiting at least 100 participants per condition provided 80% power to detect an effect size of $d = 0.40$ or greater in an ANOVA with a 5% false-positive rate. We report all measures, manipulations, and data exclusions. Survey materials, preregistrations, deidentified data, and code are accessible at:

https://researchbox.org/3319&PEER_REVIEW_passcode=ECBWDK

4. Studies 1a and 1b

Studies 1a and 1b test whether there are systematic self-other differences in expectations about adherence to the food norm of waiting to eat. We examine attitudes about both prescriptive as well as descriptive norms because, although these norms are formed based on different processes (Lapinski & Rimal, 2005), they frequently inform each other and can exert a joint influence on people's judgments (Eriksson et al., 2015).

Participants read that one person received their food (i.e., either they or the other person; randomized between subjects) while the other had not yet, and indicated to what extent they or the other person should wait (prescriptive norm, Study 1a) or would wait (descriptive norm, Study 1b) until the dining companion's food has arrived versus begin eating immediately. In both studies, we predict self-other differences in people's attitudes towards norm adherence: people will believe that they both *should* and *would* follow the norm to wait to eat more so than their dining companions, because we hypothesize these self-other differences are based on differences in the perceived utility (i.e., psychological costs and benefits) of norm adherence, independent of whether the norm is prescriptive or descriptive.

4.1 Method

4.1.1. Participants. For Study 1a, we received 299 completed responses through Amazon's Mechanical Turk (MTurk) as part of a longer study ($M_{\text{age}} = 41.14$, $SD = 12.08$; 41.1% female, 57.9% male, 1% other/missing). One participant accessed the study but did not complete the dependent measure. In this study, age and gender were appended using Positly, an MTurk recruitment platform. In all other studies, participants reported their age and gender at the end of the study. For Study 1b (preregistered), we received 200 completed responses through Prolific Academic ($M_{\text{age}} = 36.98$, $SD = 12.90$; 60.0% female, 36.5% male, 3.5% non-binary/other/prefer not to answer).

4.1.2 Study 1a procedure. Participants in Studies 1a and 1b all imagined a situation where they were dining with another person (Study 1a: friend; Study 1b: acquaintance; gender unspecified in all studies) in a 2(food receiver: self vs. other) between-subjects design. In Study 1a, participants randomly assigned to the other condition imagined that the other person got their food first, and were asked: "Should they wait for you to get your food to start eating, or should they start eating immediately?" (1 = They should definitely wait for me to get my food; 7 = They should definitely begin eating immediately). Participants randomly assigned to the self condition saw an analogous situation where they received the food first, and were asked whether they should wait or eat (1 = I should definitely wait for them to get their food; 7 = I should definitely begin eating immediately). We analyzed the results using an independent samples t-test with this measure as the dependent variable and condition as the independent factor. We also tested for potential gender effects using an ANOVA, in this and all studies, though we have no specific predictions for the role of gender.

4.1.3 *Study 1b procedure.* In Study 1b, participants saw a very similar scenario and considered their own responses (self condition) versus that of others (other condition). Rather than being asked what they versus the other *should* do as in Study 1a, we asked what they versus the other *would* do (1 = [I/They] would definitely wait; 7 = [I/They] would definitely eat). Since this study has two between-subjects conditions and a single dependent variable, our primary analysis involved an independent samples t-test. While we had preregistered using an ANOVA for the main analysis, we opted for the t-test for parsimony, as both tests yield identical results in this specific design.

4.2 Results and Discussion

4.2.1 *Study 1a.* An independent-samples t-test revealed a statistically significant self-other difference such that participants believe that they should wait ($M_{\text{self}} = 2.34$, $SD = 1.67$) to a greater extent than others should ($M_{\text{other}} = 4.70$, $SD = 1.88$; $t(296) = 11.51$, $p < .001$, $d = 1.34$). These results remain unchanged when analyzing only male and female participants (due to very small sample sizes of participants identifying their gender in other ways) and including participants' gender as a factor in a two-way ANOVA alongside food receiver condition. Results showed that gender had a significant main effect, such that women were more likely to wait (vs. eat) compared to men ($F(1, 291) = 4.28$, $p = .039$); however, the main effect of food receiver condition remained ($F(1, 291) = 125.55$, $p < .001$) and there was no interaction effect between gender and food receiver condition ($F(1, 291) = 0.102$, $p = .749$).

4.2.2. *Study 1b.* An independent-samples t-test revealed a similar result as Study 1a. When asked what they versus others would do, participants believe that they would wait ($M_{\text{self}} = 2.29$, $SD = 1.55$) to a greater extent than others would ($M_{\text{other}} = 3.61$, $SD = 1.71$; $t(198) = 5.72$, $p < .001$, $d = 0.81$). These results remain unchanged when including participants' gender (male vs.

female only) as a factor in a two-way ANOVA alongside food receiver condition. Gender had neither a significant main effect nor an interaction effect with the food receiver condition, $F_s < .919, ps > .339$.

4.2.3 Discussion. The results of Studies 1a and 1b reveal a self-other difference, such that in Study 1a, people's preference for adhering to the norm of waiting to eat is stronger for the self than for others. Study 1b reveals a similar result for what people would do, thus the self-other difference exists for prescriptive as well as predicted behavior. Unlike previous research showing that people overestimate others' norm endorsement (e.g., Prentice & Miller, 1993), our results show that both desired and perceived norm adherence is lower for others than for the self. However, the results of Study 1b could reflect a tendency towards self-serving evaluations or socially desirable responding whereby people report they would be more likely to show desirable behavior than others (Alicke, 1985; Brown, 1986). Therefore, in the rest of our studies, we measure people's prescriptive beliefs about what they and others should do to capture attitudes about norm adherence that are less likely to be influenced by socially desirable responding.

5. Studies 2a and 2b

Studies 2a and 2b explore the mechanism underlying the effect. We have theorized that when a dining companion has received their food, people cannot readily assess the internal costs and benefits that arise for the other person. Thus, we predict that the self-other difference in waiting to eat occurs because people underestimate the other person's costs and benefits of waiting. In Study 2a, we directly test this mechanism through mediation analysis. Specifically, we predict that people will anticipate more positive feelings about waiting themselves than they attribute to others in the same situation. These different attributions of emotional experiences

(i.e., the perceived differences in how good or bad one would feel waiting versus how others would feel) should mediate the self-other difference in normative judgments about waiting.

In Study 2b, we sought further evidence for how the costs and benefits of waiting and eating (i.e., the benefits of norm adherence vs. the costs of norm violation) vary for the self versus others. We predict that participants will attribute different psychological experiences to themselves versus others. Specifically, in line with our proposed mechanism, we expect participants will anticipate others to experience fewer negative consequences (costs) when violating the norm by eating first, and fewer positive consequences (benefits) when adhering to the norm by choosing to wait than they themselves will.

5.1 Method

5.1.1 Participants. For Study 2a (preregistered), we received 201 completed responses through MTurk ($M_{\text{age}} = 46.17$, $SD = 12.66$; 47.3% female, 52.2% male, 0.5% prefer not to answer). For Study 2b (preregistered), we received 403 completed responses through Prolific Academic ($M_{\text{age}} = 41.85$, $SD = 12.69$, 2 missing; 55.1% female, 42.4% male, 2.5% other/missing). Three participants did not complete the dependent measure in Study 2b.

5.1.2 Study 2a procedure. Participants followed a similar procedure to that of Study 1a and evaluated what they (self condition) versus their acquaintance (other condition, between subjects) should do when one party receives their food before the other (i.e., 1 = [I/They] should definitely wait, 7 = [I/They] should definitely eat). In addition to this main dependent variable, we also measured our proposed mediator: How good or bad would [you/they] feel if [you/they] decided to wait rather than eat immediately? (-10 = very bad; 10 = very good). We presented the two measures in random order. Note that we preregistered using an ANOVA for the main

analysis, however, for parsimony, we used two independent samples t-tests. As preregistered, we also performed a mediation analysis using model 4 of the Hayes process macro.

5.1.3 Study 2b procedure. This study employed a 2(food receiver: self vs. other) x 2(decision: wait vs. eat) between-subjects design. Participants evaluated how they versus someone else would feel if they decided to either eat or wait. Specifically, we presented all participants the scenario from Study 2a. We asked participants in the wait condition the feelings question from Study 2a. We asked participants in the eat condition: How good or bad would [you/they] feel if [you/they] decided to eat immediately rather than wait? (-10 = very bad; 10 very good). As preregistered, we used an ANOVA to investigate the effect of our two factors on the dependent measure. Further, we were interested in the simple effects of food receiver within the decision to eat versus wait.

5.2 Results and Discussion

5.2.1 Study 2a. An independent samples t-test supported our predictions, showing that participants believed that they should wait ($M_{\text{self}} = 1.98$, $SD = 1.33$) to a greater extent than others should ($M_{\text{other}} = 4.31$, $SD = 2.03$; $t(199) = 9.59$, $p < .001$, $d = 1.35$). An independent samples t-test on the feelings question revealed that people expected to feel better upon waiting ($M_{\text{self}} = 4.81$, $SD = 4.25$) than they predicted others would ($M_{\text{other}} = 1.50$, $SD = 4.64$; $t(199) = -5.27$, $p < .001$, $d = 0.74$). These results remain unchanged when including participants' gender (male vs. female only) as an additional factor in an ANOVA, as participant gender showed neither a significant main effect nor an interaction effect with the food receiver condition, $F_s < 0.430$, $ps > .513$.

The predicted feelings and attitude measures were correlated ($r(201) = -.415$, $p < .001$). Model 4 of the PROCESS Macro with 5000 bootstrapped samples revealed a significant indirect

effect ($b = -.1810$, $SE = .0594$, 95% CI: LL = $-.3068$, UL: $-.0724$; Hayes, 2017). Thus, the predicted feelings from waiting are a mechanism underlying the attitude that people themselves should wait more so than others. There is one alternative specification possible for this mediation which would involve switching the causal order such that the decision to eat versus wait (i.e., the dependent measure in our analysis above) would cause the feelings associated with the decision (i.e., the mediator in our analysis above). This model is unlikely to reflect the current context, where it is more likely that how someone feels about eating versus waiting drives their decision to eat versus wait.

5.2.2. Study 2b. An ANOVA with the food receiver condition (self vs. other) and the decision condition (wait vs. eat) as independent factors and the feelings measure as the dependent variable revealed a significant main effect of decision ($F(1, 396) = 217.41$, $p < .001$, $\eta_p^2 = 0.35$) and a non-significant main effect of food receiver ($F(1, 396) = .24$, $p = .622$, $\eta_p^2 < 0.01$). Results revealed a significant interaction ($F(1, 396) = 135.53$, $p < .001$, $\eta_p^2 = 0.26$), such that participants saw greater costs of eating for themselves than for others ($M_{\text{self}} = -5.57$, $SD = 3.91$, $M_{\text{other}} = -0.29$, $SD = 4.58$; $F_{\text{simple effect}}(1, 396) = 72.91$, $p < .001$, $\eta_p^2 = 0.16$) and greater benefits of waiting for themselves than for others ($M_{\text{self}} = 5.91$, $SD = 4.33$, $M_{\text{other}} = 1.06$, $SD = 4.54$; $F_{\text{simple effect}}(1, 396) = 62.76$, $p < .001$, $\eta_p^2 = 0.14$). These results remain unchanged when including participants' gender (male vs. female only) in an additional factor in an ANOVA, as gender had no significant main effect, no significant two-way interaction between gender and food receiver, and no significant three-way interaction effect with the food receiver condition and the cost-benefit measure, $F_s < 2.47$, $p_s > .117$. There was a significant interaction between gender and decision condition ($F(1, 382) = 5.32$, $p = .022$, $\eta_p^2 = .014$).

5.2.3 *Discussion.* Through both a measured and manipulated process approach, these studies reveal a tendency for people to underestimate both the costs of norm violation and benefits of norm adherence for others (vs. the self). These results show that people themselves derive positive feelings from abiding by the social norm; however, they do not expect that others feel similarly positive upon waiting. Correspondingly, the negative utility of violating the norm is also experienced more strongly for oneself than is predicted for others. We posit that these results arise because many of the benefits of norm adherence and the costs of norm violation are largely inaccessible since they are based on internal feelings. In the following studies, we examine whether we can reduce the self-other difference observed in prior studies.

6. Study 3

In Study 3, we examine whether the self-other difference in attitudes towards the norm to wait to eat may be attenuated through a perspective-taking manipulation. Our previous studies established that a gap in information accessibility between the self and others plays a role in driving the observed self-other difference. This raises the interesting question of whether prompting people to consider their counterpart's perspective may reduce this self-other difference. This would occur if people are unwilling to take their counterpart's perspective, because the norm to wait to eat is sufficient to explain their waiting behavior. However, it is also possible that people find it challenging to assess the intensity of the other's emotional experience. Thus, even when people consider the other's perspective, they underestimate the impact of their internal costs and benefits in explaining their behavior. If people cannot fully account for others' psychological utility of waiting, a perspective-taking intervention might reduce but not eliminate the observed self-other difference.

6.1 Method

6.1.1 Participants and procedure. Study 3 (preregistered) received 404 responses through

MTurk ($M_{\text{age}} = 42.30$, $SD = 12.70$; 42.6% female, 55.9% male, 1.5% other/prefer not to answer).

All participants were exposed to our basic scenario in a 2(food receiver: self vs. other) x

2(perspective taking: control vs. perspective taking) between-subjects design. Participants

assigned to the perspective taking condition saw the following additional instructions: “Please

briefly note down three things your acquaintance might be thinking or feeling in this situation,

including what they think each of you should do.” Then, all participants answered the primary

dependent measure from prior studies, indicating their beliefs about whether they versus the

other person should wait or begin eating immediately. As preregistered, we analyzed both the

effect of the two factors (self vs. acquaintance; control vs. perspective taking) on the decision to

wait vs. eat using a two-way ANOVA, as well as the simple effects to examine whether the

effect of who gets their food first changes in the perspective taking condition.

6.2 Results and Discussion

6.2.1 Results. An ANOVA using the food receiver condition (self vs. other) and the

perspective taking condition (control vs. perspective taking) as independent factors revealed a

main effect of the food receiver condition ($F_{\text{receiver}}(1, 400) = 183.77$, $p < .001$, $\eta_p^2 = 0.32$), no

main effect of perspective taking ($F_{\text{perspective}}(1, 400) < .01$, $p = .966$, $\eta_p^2 < 0.01$), and a significant

interaction ($F_{\text{interaction}}(1, 400) = 5.39$, $p = .021$, $\eta_p^2 = .01$). An examination of the simple effects

revealed that, despite a significant interaction, the self-other difference is robust in both the

control condition ($M_{\text{self}} = 2.24$, $SD = 1.44$, $M_{\text{other}} = 5.15$, $SD = 1.95$; $F_{\text{simple effect}}(1, 400) = 132.44$,

$p < .001$, $\eta_p^2 = .25$) and the perspective taking condition ($M_{\text{self}} = 2.66$, $SD = 1.90$, $M_{\text{other}} = 4.72$,

$SD = 1.99$; $F_{\text{simple effect}}(1, 400) = 60.20$, $p < .001$, $\eta_p^2 = .13$). These results remain unchanged when

selecting only male and female participants and including gender as an additional factor in the ANOVA. Specifically, gender had neither a significant main effect, nor a two-way interaction between gender and perspective taking condition, nor a three-way interaction effect with the food receiver and perspective taking conditions, $F_s < 2.11$, $p_s > .147$. There was a significant interaction between gender and food receiver condition ($F(1, 390) = 5.94$, $p = .015$, $\eta_p^2 = .015$).

6.2.2 Discussion. The results of Study 3 revealed a statistically significant but surprisingly limited impact of perspective-taking on the self-other difference in attitudes towards the norm of waiting to eat. Despite being explicitly instructed to consider the thoughts and feelings of their dining companion, participants continued to exhibit a stronger preference for norm adherence for themselves compared to others. The persistence of this self-other difference aligns with previous research demonstrating the challenges of accurate perspective-taking, even when individuals are specifically directed to do so (Eyal et al., 2018).

One might have expected our perspective-taking manipulation to have a larger impact, given that presumably all participants have experienced each of both roles (i.e., the person with or without food) at some point in their lives. The limited effectiveness of the intervention may reflect the inherent difficulty of accessing and accurately interpreting others' internal experiences. These results suggest that the norm of waiting to eat may have been internalized to such a degree that even when circumstances surrounding the norm change (i.e., being asked to consider the other's perspective), individuals still maintain a differential attitude towards norm adherence for the self versus others.

7. Study 4

While Study 3 demonstrated the persistence of the self-other difference even in the face of perspective-taking, it left open the question of whether this difference might be reduced by

directly addressing the perceived costs of norm violation. In Study 4 we sought to investigate whether explicitly removing the social constraint of the norm might be effective in reducing the difference. Specifically, we informed participants that the person whose food arrived first has explicitly instructed the person with the food to eat. This face valid intervention may encourage people to revise their cost-benefit assessments and potentially align their attitudes with their dining companion's preferences. However, we expect that the self-other difference emerges due to the counterpart's internal costs and benefits not being accessible. If so, then the release from the norm might not affect people's internal utility for following the norm (e.g., not wanting to be observed, feeling awkward). If these inaccessible internal costs and benefits drive the self-other difference in attitudes, these self-other differences should prevail even when people are released from the norm.

7.1 Method

7.1.1 Participants and procedure. Study 4 received 400 responses using Prolific Academic ($M_{\text{age}} = 42.06$, $SD = 13.05$, 1 missing; 43% female, 56% male, 1% other/prefer not to answer). All participants were exposed to the scenario from Study 2a in a 2(food receiver: self vs. other) x 2(release from the norm: control vs. release from the norm) between-subjects design. In the condition where participants were explicitly released from the norm, they additionally read that the food receiver told their dining companion to go ahead and eat. Specifically, in the self-release condition, participants read: "You tell your acquaintance to go ahead and eat." In the other-release condition, participants read: "Your acquaintance tells you to go ahead and eat." Then, all participants answered the primary dependent measure from prior studies.

As preregistered, we analyzed both the effect of the two factors (food receiver: self vs. other; release from the norm: control vs. release from the norm) on the decision to wait vs. eat

using a two-way ANOVA, as well as the simple effects to examine the effect of who gets their food first in both the control and the release conditions.

7.2 Results and Discussion

7.2.1 Results. An ANOVA using the food receiver condition (self vs. other) and the release condition (control vs. release) as independent factors revealed two main effects ($F_{receiver}(1, 396) = 274.40, p < .001, \eta_p^2 = .41$; $F_{release}(1, 396) = 16.99, p < .001, \eta_p^2 = .04$) and no interaction ($F_{interaction}(1, 396) = .54, p = .465, \eta_p^2 < 0.01$). In the control condition, participants believed that they should wait to eat ($M = 2.05, SD = 1.54$) to a greater extent than others ($M = 5.17, SD = 2.06$; $F_{simple\ effect}(1, 396) = 149.58, p < .001, \eta_p^2 = .27$). The release manipulation boosted the tendency to eat; however, it did so similarly in both the self ($M = 2.92, SD = 1.97$) and other ($M = 5.79, SD = 1.66$) conditions ($F_{simple\ effect}(1, 396) = 125.35, p < .001, \eta_p^2 = .24$). These results remain unchanged when including participants' gender (male vs. female only) as an additional factor in the ANOVA, as gender had neither a significant main effect, nor a two-way interaction between gender and release condition, nor a three-way interaction effect with the food receiver and release conditions, $F_s < 0.202, p_s > .653$. There was a marginally significant interaction between gender and food receiver condition ($F(1, 388) = 3.71, p = .055, \eta_p^2 = .009$).

7.2.2 Discussion. The results of Study 4 provide further insight into the nature of the self-other difference in attitudes towards the food norm of waiting to eat. Despite explicitly releasing participants from the norm, the self-other difference persisted. This study demonstrates that our results cannot be explained by participants merely waiting for the other party's permission to eat or by a general discomfort around imposing norms on others or asking others to follow norms on one's behalf. The release manipulation, while effective in increasing the overall tendency to eat, likely through decreasing the costs of eating, did so similarly in both the self and other

conditions. This suggests that explicit permission can modify behavior to some extent but cannot eliminate the underlying difference in attitudes, perhaps because it did not systematically address the difference in accessibility of internal costs and benefits between self and other. This self-other difference persists even when the individual's costs of norm violation are explicitly reduced.

8. General Discussion

In six experiments, we document a novel self-other difference in attitudes towards the prevalent food norm of waiting to eat: people believe that they should wait when they receive their food first, but they are less likely to expect the same behavior from others. While prior research has documented various benefits of adhering to food norms (e.g., being accepted or learning about which foods are appropriate to eat; Higgs, 2015), we find that people perceive these benefits as less pronounced for others than for themselves. Specifically, people recognize that following the norm of waiting to eat generates psychological utility for themselves but believe this is less true for others. This asymmetry appears to be driven by differential access to the psychological benefits and costs of norm adherence versus violation, which are more accessible for the self than for others. Thus, while people believe that following the norm would be a positive experience for themselves and norm violation would be negative, they predict more muted emotional responses for others. In addition to documenting a novel self-other difference, we demonstrate that it is robust to theoretically and practically relevant interventions. Specifically, neither encouraging norm violation by considering the perspective of the other party (Study 3) or being explicitly encouraged to eat (Study 4) meaningfully reduces this asymmetry in norm adherence expectations.

Our findings build on past research demonstrating the challenges of perspective taking, particularly people's tendency to underappreciate others' psychological experiences (e.g., Schroeder & Epley, 2020; van Boven & Loewenstein, 2005) by examining this miscalibration in the context of typical food consumption situations. The limited effectiveness of perspective-taking may be due to fact that the norm itself could paradoxically inhibit deeper perspective-taking. When observing someone waiting for others' food to arrive, the existence of the social norm provides a seemingly sufficient explanation for the behavior (i.e., they are waiting because that is what people are supposed to do). This explanation may preempt seeking access to others' psychological motivations, making people less likely to consider the internal experiences that drive norm adherence even when explicitly prompted to perspective-take.

We recognize the real-world decisions about waiting versus eating may involve multiple contextual factors and encourage future research to explore potential moderators of the self-other difference that we have documented. We predict that strong situational factors may override the difference. For example, time pressure might lead people to believe both they and others should eat immediately, regardless of norm expectations. Similarly, if one person receives food that rapidly declines in utility (e.g., hot brownie with ice-cream), both parties might endorse norm violation. Further, a myriad of real-world factors is likely to moderate our results. For example, the formality of the dining occasion and the relationship to the dining companion may influence the strength of our effect. While the current work focuses on documenting and understanding a robust phenomenon affecting daily interpersonal interactions, we encourage future research to deepen our collective understanding of the norm of waiting to eat.

8.1 Limitations

One limitation of our work is that our studies are based on hypothetical scenarios, employing single-item measures of the focal dependent variable. While single-item measures have been criticized for potential measurement error and validity concerns, they can be appropriate when measuring concrete, unambiguous constructs (Bergkvist & Rossiter, 2007), as is the case with our specific behavior of waiting to eat. Additionally, if single-item measures involve higher measurement error, this would likely make our tests more conservative rather than less reliable, as such error would make it more difficult to detect true effects (Fuchs & Diamantopoulos, 2009).

All studies in the current work are based on a scenario. To ensure our scenario was ecologically valid, we ran a pretest that confirmed that participants found the situation described highly realistic despite its hypothetical nature. We use hypothetical scenarios because our focal measure pertains to attitudes about norm adherence and beliefs about its utility, constructs that are difficult to observe directly in behavioral studies. However, we acknowledge the limitations inherent to hypothetical studies and encourage future research to examine actual behavior.

Although all our studies were conducted online, several measures were implemented to ensure data quality (Jaeger & Cardello, 2022). A key strength of our experimental paradigm is its efficiency, as it combines brief, straightforward scenarios with minimal questions, reducing the cognitive burden on participants and the likelihood of satisficing response behaviors. Short surveys with straightforward tasks have been shown to yield higher quality data compared to longer questionnaires (Galesic & Bosnjak, 2009). While online survey environments cannot be fully controlled for distractions or multitasking, the concise nature of our study design was intended to minimize the impact of these potential limitations compared to more complex study designs. Participants were recruited through Prolific and Positly, an MTurk recruitment platform.

Both platforms employ extensive quality control measures. Prolific maintains strict policies regarding participant verification and data quality (Albert & Smilek, 2023; Palan & Schitter, 2018). Similarly, Positly provides multiple tiers of quality control (<https://www.positly.com/quality-control/>). Nevertheless, it is uncertain whether bots generated by large-language-model were detected.

Another potential limitation pertains to the fact that all of our studies were conducted with US-based participants. Social norms research has shown that cultures differ in the strength of influence that norms hold over people (Gelfand, 2012). Although our pilot study showed that the norm to wait to eat is pervasive across cultures, it could nevertheless be less influential in some cultures compared to others. Yet, we would expect the self-other difference in perceived utility of norm adherence to replicate across cultures, because the lack of access to others' internal experiences should persist also in different cultural contexts. In cultures where norms are "tighter" (Gelfand, 2012), such self-other differences might even be more pronounced because normative behavior is expected to such large extents that this explains people's overt norm adherence without any need to speculate about internal costs and benefits as additional reasons.

8.2 Implications

Regarding theoretical implications, our findings extend beyond the specific norm of waiting to eat, contributing to a broader understanding of food norm adherence. While adhering to food norms generally provides psychological benefits, such as being accepted by others and being "correct" in one's behavior, our research demonstrates that these benefits (or utility) may be differently perceived for the self versus others. Thus, future research should explore not only the influence that norms exert over people's eating behavior, but also people's attitudes about

such norms and whether these have downstream consequences for people's enjoyment of social eating situations.

The self-other difference in attitudes towards norm adherence might emerge for other food norms as well where norm adherence provides mostly benefits that are inaccessible to others. For example, violating the norm to order gender-stereotypical food (Vartanien et al., 2015) might be experienced as more costly for the self compared to for others. Such differences could have consequences in dining situations where people choose food for others (e.g., hosting a meal or ordering catering) where people might more readily violate food stereotypicality norms because they lack access to the psychological costs that others might experience. We encourage future research to explore the importance of perceived utility in norm adherence versus violation and whether it applies to social judgments around food norms more generally.

Regarding practical implications, our research suggests that restaurants as well as people hosting at home should avoid situations where some people are served their food before others. We show that people may experience discomfort in such situations, which could ultimately influence their satisfaction with the dining experience. However, restaurants and hosts might be unaware of the extent of people's discomfort, as this is largely experienced internally. Thus, this discomfort might be underestimated and not taken into account when making decisions about the sequence of food preparation. Although the social norm to wait to eat exists to govern behavior in these situations, our research shows that this norm is experienced in more complex ways than previously thought.

561 **Statements and declarations:** The Pilot Study, Pretest, and Studies 1b, 2a, 2b, 3 and 4 were
562 preregistered. Survey materials, preregistrations, deidentified data, and code are accessible at:
563 https://researchbox.org/3319&PEER_REVIEW_passcode=ECBWDK
564 This research did not receive any specific grant from funding agencies in the public, commercial,
565 or not-for-profit sectors.
566 Declarations of interest: none.

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