Supporting information

Including exploratory correlations and additional exploratory analyses.

Table S1

Study 1 Means, standard deviations and correlations for demographics and motivation measures collapsed across conditions (n =123)

	1	2	3	4	5	6	7	8	9
Age (1)	–								
Education (2)	.000	–							
BMI (3)	.191*	-.012	–						
Weight loss goal (4)	-.052	-.138	.193*	–					
Eating concerns (5)	.232**	-.001	.004	-.027	–				
Dietary restraint (6)	.248**	-.001	.234**	.288**	.372**	–			
Temptation motivation (7)	-.053	-.037	-.062	-.163	-.066	-.267**	–		
Goal motivation (8)	.109	-.096	.161	.241**	.555**	.378**	-.177	–	
Competing motivations (9)	-.106	.040	-.146	-.264*	-.410**	-.422**	.758**	.776**	–
M	31.45	77.2 [a]	22.71	3.94	70.66	14.55	4.08	3.96	0.11
SD	10.18		1.25	3.46	15.14	4.25	1.01	1.05	1.58

Note. [a] Percentage of participants with a bachelor or master degree, * $p < .05$, ** $p < .01$.

Table S2

Study 2 Means, standard deviations and correlations for demographics, motivation measures and food intake collapsed across conditions (n =106)

	1	2	3	4	5	6	7	8	9	10	11
Age (1)	–										
Education (2)	.475**	–									
BMI (3)	.213*	.000	–								
Weight loss goal (4)	.253*	.132	.762**	–							
Eating concerns (5)	.084	.090	.067	.112	–						
Dietary restraint (6)	.181	.100	.467**	.559**	.325**	–					
Hunger[a] (7)	-.018	.074	.052	-.043	-.029	-.082	–				
Temptation motivation (8)	.228*	.259*	.036	-.045	.032	-.121	.316**	–			
Goal Motivation (9)	.226*	.146	.133	.269**	.541**	.458**	-.178	-.036	–		
Competing motivations (10)	.016	.093	-.062	-.211*	-.334**	-391**	.344**	.751**	-.686**	–	
Food Intake (kcal) (11)	.105	.078	.020	-.164	-.030	-.274**	.383**	.527**	-.150	.482**	–
M	22.46	79.2 [b]	22.77	3.95	65.37	14.82	44.26	3.37	4.04	-0.67	123.46
SD	2.94		2.75	3.51	15.45	4.93	24.67	1.11	-0.67	1.52	144.48

Note. Demographic information was missing for 1 out of N = 107 participants, due to a technical error, [a] All correlations, *M* and *SD* for hunger *n* = 104 , [b] Percentage of participants with a bachelor or master degree, * $p < .05$, ** $p < .01$

Additional Exploratory analysis Study 2 - Restrained Eating (suggested by reviewer).

Exploratory data analysis

To explore if restrained eating moderated the effect of self-licensing on caloric intake we used a hierarchical multiple regression analysis. We entered restrained eating and condition (justification vs free-thought control) into step 1 of the model and the interaction term in step 2. Restrained eating was mean centered prior to the analysis to prevent multicollinearity. The standardized coefficients (β) for the predictors and interaction terms are reported below.

Results

At step 1, the overall model was significant and accounted for 14% of variance in caloric intake, $R^2 = .14$, $F(2, 104) = 8.23$, $p < .001$. Both variables were significant predictors $\beta = -.31$, $t(104) = -3.36$, $p = .001$ (restrained eating), and $\beta = .22$, $t(104) = 2.45$, $p = .016$ (condition). Adding the interaction term increased the explained variance with 3% , a significant increment, $\Delta R^2 = .03$, $\Delta F(1, 103) = 4.27$, $p = .041$. At step 2, results revealed a non-significant main effect of restrained eating, $\beta = -.11$, $t(103) = -.791$, $p = .431$, but a significant main effect of condition, $\beta = .22$, $t(103) = 2.48$, $p = .015$. The interaction effect was also significant, $\beta = -27$, $t(103) = -2.07$, $p = .041$.

To interpret this interaction effect we performed simple slopes analyses (see Figure S1) by using model 1 in PROCESS macro (Hayes, 2018). For validation of these results, we used 95% bootstrap confidence intervals (z = 5000) to examine the moderated relationship. For participants scoring low on restrained eating, the effect of self-licensing on caloric intake was significant, $\beta = 113.57$, $t(103) = 3.23$, $p =. 002$, 95% BootCI [43.80, 183.34]. In contrast, for participants scoring high on restrained eating, the effect of self-licensing on caloric intake was non-significant, $\beta = 8.02$, $t(103) = 0.21$, $p = .832$, 95% BootCI

[-66.62, 82.65]. These exploratory results suggest that justifications had a larger effect on caloric intake for participants scoring lower on restrained eating.

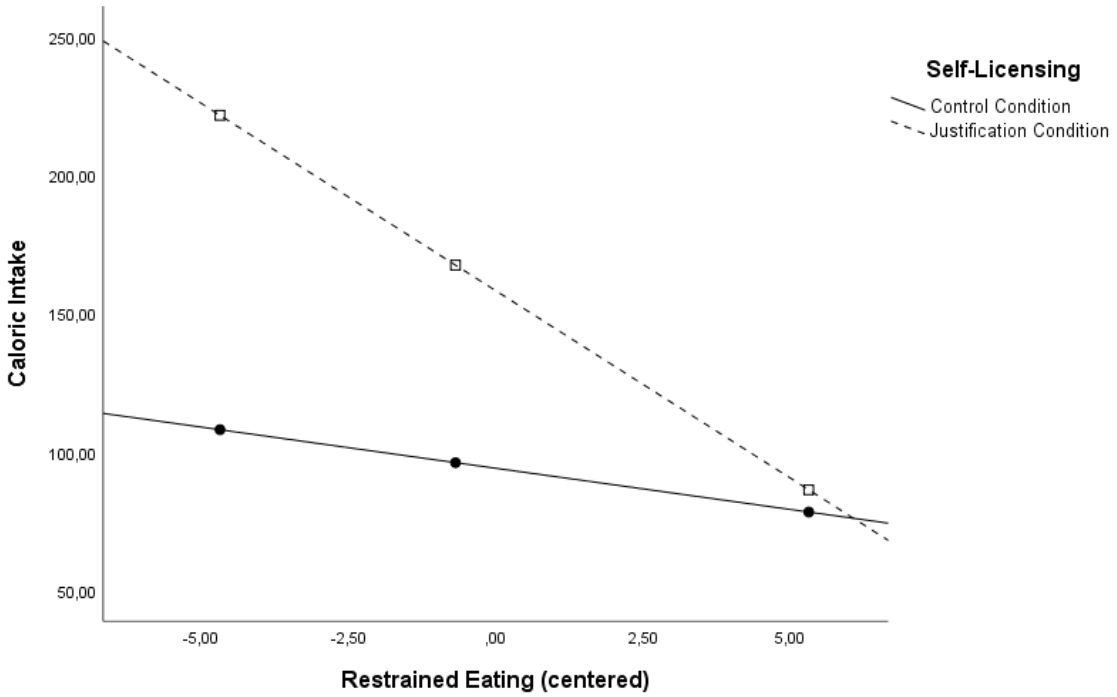

Figure S1. Simple slopes of the regression of restrained eating (mean centered) on caloric intake for the two conditions of self-licensing (Study 2).

Additional Exploratory analyses Study 2 – Moderation model (suggested by reviewer)

Exploratory data analyses

To broaden the conceptualization of the impact of self-licensing we explored if self-licensing moderated the relationship between 1) goal motivation and temptation motivation; and 2) goal motivation and caloric intake. Following previous work by Taylor, Webb and Sheeran (2014) self-licensing might have moderated the impact (not the level) of goal motivation. We used two separate hierarchical multiple regression analyses with either temptation motivation or caloric intake as the dependent variable. In both analyses, we entered goal motivation and condition (justification vs. control) simultaneously into step 1 of the model. We then included the interaction terms in step 2. Goal motivation was mean centered prior to the analysis to prevent multicollinearity. The standardized coefficients (β) for the predictors and interaction terms are reported below.

Results

First, we explored whether the relationship between goal and temptation motivation was moderated by condition. At step 1, the overall model was not significant, $R^2 = .002$, $F < 1$. Both variables were non-significant predictors, p's > .724. Adding the interaction term in step 2, added only 0.9% of the explained variance, a non-significant increment, $F < 1$, and none of the predictors were significant, p's > .336.

Second, we explored whether the relationship between goal motivation and caloric intake was moderated by condition. At step 1, the overall model was significant and accounted for 0.6% of variance in caloric intake, $R^2 = .059$, $F(2, 104) = 3.26$, $p = .043$. While condition was a significant predictor, $\beta = .20$, $t(104) = 2.05$, $p = .043$, goal motivation was not: $\beta = -.13$, $t(104) = -1.33$, $p = .188$. Adding the interaction term in step 2 did not improve the model, $\Delta F < 1$. The main effect for condition remained significant, $\beta = .20$, $t(103) = 2.06$,

$p = .042$. The main effect of goal motivation and the interaction term were not significant, p's $> .650$.

Reference

Hayes, A. F. (2018). PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling (White paper). Documentation available online at : www.guilford.com/p/hayes3

Taylor, C., Webb, T. L., & Sheeran, P. (2014). 'I deserve a treat!': Justifications for indulgence undermine the translation of intentions into action. *British Journal of Social Psychology*, 53, 501-520. doi: 10.1111/bjso.12043.