# Registered Report: See me, judge me, pay me: Gendered effort moralization in work and care.

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Data, materials, code, and further associated documents: <a href="https://osf.io/s8ec5/">https://osf.io/s8ec5/</a>

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# **Author contribution**

Conceptualization: LR, TT, TF

Data curation: LR, TT

Formal analysis: LR

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#### **Abstract**

The display of high effort at work is commonly rewarded with more positive moral judgments and increased cooperation partner attractiveness. This effect was shown to hold, even if higher effort is unrelated to better performance. Yet, current evidence is predominantly based on male agents situated in the work context. This leaves a meaningful gap as it prohibits generalization to the full population and neglects critical aspects of our lives besides work, such as the care context (e.g., childcare or care for elders). To enhance our understanding of effort moralization and the impact of gender stereotypes on social judgment, we conducted two studies ( $N_1 = xxx$ ,  $N_2 = xxx$ ) testing the effect between genders in two contexts—work and care. [completion at Stage 2].

Keywords: Registered Report, effort moralization, gender, work, care, bias, judgment

# **Design Table**

Question	Hypothesis	Sampling	Analysis plan	Rationale for deciding the	Interpretation given different outcomes	Theory that Format	ierte Tabelle
·		plan		sensitivity	different outcomes	be shown wrong by the outcomes	
			Aim 1: Replication	of core effect			
Can we replicate the effort moralization effect?	Individuals who invest higher effort in their work are judged higher in morality.  Individuals who invest higher effort in their care work are judged higher in morality.	We will collect data through <b>Prolific</b> . The <b>total required</b> sample size is $N = 648$ , which we will <b>oversample</b> to $N = 700$ . The required sample size per t-test is $N = 272$ .	Using a one-sided dependent Welch's t-test and respective Bayes Factor, we will test for differences in perceived moral character (core goodness and value commitment). We will further test for differences in perceived warmth, perceived competence, and pay deservingness. Yet, prior research highlighted variance in these more distal measures.	Based on the smallest effect size of interest (cite Lakens, 2022) (Lakens, 2022) approach, we aim to power for a small effect $d = 0.20$ (Cohen, 1988) ( $a = .05, 1-\beta = .95$ , onetailed). This was computed using G*Power 3.1.9.7 [see supplemental material, https://osf.io/s8ec5/].	If the effect is not found, the effort moralization effect is <b>not replicated</b> in the target magnitude. This can be due to the absence of the effect or due to the pooling of genders, which is tested in the following steps.  If the effect is not found, it is potentially <b>not generalizable</b> to care work. Yet, the following analyses test the results in a more fine-grained manner.	Effort moralization theory's hat for generalizabi Staaten could be shown undetectable under the current conditions of the study.  Effort moralization is potentially not generalizable to the care context.	matiert: Schriftart: Fett, Englisch (Vereinigte
I		Aim 2	2: moral character as a function	of gender, context, and effort		Format	1 ierte Tabelle
Are there	Moral character	In study 1	Using <b>mixed-ANOVA</b> with 2	Based on the smallest effect	The ANOVA can	If effort doesn't	

differences in effort moralization in the work context by gender and effort?	judgment differs by gender and effort.	(work context), we will sample $N = 350$ individuals (computed $N = 324$ )	(gender: female/male) x 2 (effort: high/low) design.  Gender serves as a between- subject factor, and effort is a within-subject factor. We further test the interaction of both terms.  The respective Bayes Factor is computed for each term.	size of interest (Lakens, 2022) approach, we aim to power for a small effect $\eta^2 = .01$ (Cohen, 1988) ( $a = .05$ , $1-\beta = .95$ , 2(gender)x2(effort)). This was computed, using G*Power 3.1.9.7 [see supplemental material, https://osf.io/s8ec5/].	illustrate whether gender and/or effort differentially influence moral character judgment in the work context.	affect moral character judgment, the effect is potentially not replicable in this context. If it shows differences by gender, the effect is potentially heterogeneous between genders (female/male).	
Are there differences in effort moralization in the care context by gender and effort?	Moral character judgment differs by gender and effort.	In study 2 (care context), we will sample $N = 350$ individuals (computed $N = 324$ )	Using mixed-ANOVA with 2 (gender: female/male) x 2 (effort: high/low) design.  Gender serves as a between-subject factor, and effort is a within-subject factor. We further test the interaction of both terms.  The respective Bayes Factor is computed for each term.	Based on the <b>smallest effect size of interest</b> (Lakens, 2022b) approach, we aim to power for a small effect $\eta^2 =$ <b>.01</b> (cite Cohen, 1988) ( $a =$ .05, 1- $\beta =$ .95, 2(gender)x2(effort)). This was computed, using G*Power 3.1.9.7 [see supplemental material, <a href="https://osf.io/s8ec5/">https://osf.io/s8ec5/</a> ].	The ANOVA and post- hoc tests can illustrate whether gender and/or effort differentially influence moral character judgment in the care context.	If effort doesn't affect moral character judgment, the effect is potentially not replicable in this context. If it shows differences by gender, the effect is potentially heterogeneous between genders (female/male).	
	Aim 3: cooperation partner satisfaction as a function of gender and effort Formatierte Tabelle						
Do gender and effort influence	wWork context: cooperation	In each study, we will	Using <b>mixed-ANOVA</b> with 2 (gender: female/male) x 2	Based on the smallest effect size of interest (Lakens,	We will be informed as to which degree <b>effort</b> is	Effort might not be a meaningful	

cooperation satisfaction?	satisfaction is predicted by gender and effort	sample sample $N = 350$ individuals (computed $N = 272$ )	(effort: high/low) design.  Gender serves as a between- subject factor, and effort is a within-subject factor. We further test the interaction of both terms.  The respective Bayes Factor is computed for each term.	2022b) approach, we aim to power for a small effect $\eta^2 =$ .01 (Cohen, 1988) ( $a = .05$ , 1- $\beta = .95$ , 2(gender)x2(effort)). This was computed, using G*Power 3.1.9.7 [see supplemental material, https://osf.io/s8ec5/].	crucial for cooperation satisfaction <b>between</b> <b>women and men</b> in the <b>work context</b> .	predictor of cooperation satisfaction. Further, there might not be differences between females and males.	
	eCare context: cooperation satisfaction is predicted by gender and effort		Using mixed-ANOVA with 2 (gender: female/male) x 2 (effort: high/low) design.  Gender serves as a between-subject factor, and effort is a within-subject factor. We further test the interaction of both terms.  The respective Bayes Factor is computed for each term.		We will be informed as to which degree <b>effort</b> is crucial for cooperation satisfaction <b>between</b> women and men in the care context.		
	Explor	atory Analysis:	are differences in effort moraliz	zation moderated by gender no	rm endorsement	Formati	erte Tabelle
Are differences in effort moralization between genders moderated by gender norm	This will be tested in the work and care context	This exploratory analysis will be performed on the computed samples size	Using multilevel modelling, we will test the effect of the interaction of gender and gender norm endorsement and the main effect of effort on moral judgement (core goodness & value	This exploratory analysis will be performed on the computed samples size of <b>Aim 2</b>	We will be informed whether gender norm endorsement moderates the influence of gender on effort moralization and whether the effect is generalizable on work	The effect is either generalizable on both contexts, context dependent or not observable with the present data.	

endorsement?	of Aim 2	commitment).	and care contexts.	
		Imer-formula: morality ~ gender*gender_norm + effort + (1 subject)  We will further compare the Bayes Factor of the model against the model without gender norm endorsement.		

#### Introduction

#### The effort moralization effect

Social judgment is crucial in daily life. People frequently encounter strangers and have to make quick inferences about their character, such as deciding whether it is safe to sit next to someone on the bus. Considering how important these decisions are, it is notable that we need to rely on rough, incomplete information to make such critical assessments—it wouldn't be feasible to administer a personality test to every passenger on the bus before choosing where to sit. We navigate such social interactions as cognitive misers, using simple processing mechanisms to reduce cognitive load (Fiske & Taylor, 1991). Instead of seeking complete information, we rely on environmental cues (e.g. valence of facial expressions; Fox et al., 2002), Fox et al., 2002), stereotypes (Aronson et al., 2021), heuristics and resulting cognitive biases (Tversky & Kahneman, 1974), and personal learning experiences (Behrens et al., 2008).

One factor that plays a dominant role in the perception of other people is moral information (Brambilla & Leach, 2014; Goodwin et al., 2014; Wojciszke, 2005); Goodwin et al., 2014; Brambilla & Leach, 2014). In this context, a particular bias has gained recent attention: the effort moralization effect (Amos et al., 2019; Bigman & Tamir, 2016; Celniker et al., 2023; Fwu et al., 2014; Bigman & Tamir, 2016; Amos et al., 2019; Celniker et al., 2023). It describes the tendency of observers to make moral character judgments based on the observed effort a person puts into a given behavior. The perceived intensity of effort amplifies moral judgments: actions perceived as "good" appear even more virtuous, while "bad" behaviors seem worse the more effort is involved (Bigman & Tamir, 2016). For example, it has been shown that donations of time are perceived as a greater (emotional) investment, and therefore better moral character, compared to donations of money (Reed et al., 2007; Johnson & Park, 2021) (Johnson & Park, 2021; Reed et al., 2007).

Interestingly, -the effort moralization effect persists, even when the addedadditional effort does not lead to increased performance (e.g., better outcomes at work) (e.g., better outcomes at work) (e.g., better outcomes at work). Celniker et al., 2023). This points to the interpretation that the exertion of effort is valued by itself; rather than its practical benefits. This observation was replicated well, yet it appears to vary between cultures in magnitude (Mexiko: d = .14–.28, Germany: d = .34–.37, France: d = .38, US: d = .60, South Korea: d = .71, add Mexiko/Germany) (Celniker et al., 2023; Tissot & Roth, 2024).

Further, it was shown that the display of high effort—\_\_contrasted with low effort for the same outcome—\_\_led to an increased chance of being selected as a cooperation partner in a follow-up trust game (Celniker et al., 2023), which has meaningful implications, especially for the work and career context.

#### Current gaps in the effort moralization literature: context and gender

Prior literature has mostly focused on two types of contexts, in which effort moralization comes to play: work contexts (Amos et al., 2019; Celniker et al., 2023) and charity or helping behavior (Bigman & Tamir, 2016; Celniker et al., 2023). These contexts are justified targets, as these are impactful domains in our lives and commonly demand effort. Yet, it left the large domain of unpaid care work uncovered, which is estimated to make up 245 hours of annual work for the average American citizen (Mason & Robbins, 2024). Two-thirds of care work (65%) is done by women (Mason & Robbins, 2024), and often goes with little societal recognition (Antonopoulos, 2008) and high mental load (Dean et al., 2021), while it surpasses the value of \$1 trillion dollars in the US per year (National Partnership for Women & Families, 2024). Further—to our knowledge—the literature on the effort moralization effect focused on either male or gender-neutral (e.g., Person A) vignettes and excluded female agents from described scenarios. Hence, investigating the role of an additional critical context, as well as between-gender effects and differential effects on moral

character judgment, appears warranted for the generalizability of the effect. Understanding gender bias in the effort moralization effect is crucial for addressing inequalities (e.g., reinforcement of traditional gender roles).

Celniker et al. (2023) discovered found that individuals who exert more effort to achieve the same performance in widget-making are more likely to be chosen as partners in a trust game. However, cooperation partners are not always freely chosen but can be assigned as well (e.g., project assignments in the workplace). We, therefore, extend the literature by assessing individuals' satisfaction with assigned, instead of freely chosen, partners. This provides additional insights that reflect the cooperative dynamics frequently found in everyday life.

#### Gendered stereotyping in moral judgment and effort perceptions

As shown in prior research, social judgment is not immune to the influences of stereotyping, including gender biases. These extend to differing expectations of behavior and personality based on a person's gender. For instance, while men are often seen as more agentic, women are perceived as more communal (e.g., earing or helpful) (Hentschel et al., 2019). (e.g., caring or helpful; Hentschel et al., 2019). These expectations may inform differences in effort moralization, examplewise for example, through backlashing, and can differ between contexts.

This describes how expectations, for instance, those formed by gender, can lead to differing social judgments (Rudman, 1998). (Rudman, 1998). Individuals who deviate from stereotypical behavior tend to be subjected to harsher sanctions. For example, women receive more severe disciplinary sanctions for ethical violations in the workplace (Kennedy et al., 2016; Rudman, 1998), (Kennedy et al., 2016; Rudman, 1998), whereas men face greater criticism for non-agentic behavior in leadership contexts (Moss Racusin et al., 2010). (Moss-Racusin et al., 2010).

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For effort moralization, these prior findings hold potential for differences in judgment between gender, effort levels, and social context. Male stereotypes of agentic behavior could cause stronger differences in moral judgment at work, as men are expected to work hard and autonomously.

The interplay between effort moralization and gender may expand to the caregiving contexts. Although gender roles have shifted, with more women entering the workforce (Toossi & Morisi, 2017)(Toossi & Morisi, 2017) and men contributing more to family labor (Sayer, 2016), (Sayer, 2016), women still do most of the care work (Charmes, 2019). (Charmes, 2019). These persistent gender role expectations shape how caregiving efforts are perceived. Research on double standards has shown that mothers face harsher criticism for low care efforts while fathers receive praise for being involved (Deutsch & Saxon, 1998). (Deutsch & Saxon, 1998).

In sum, existing literature indicates that gender biases likely play a role in effort moralization. The specific goals are outlined below.

#### How can the present project inform psychological theorizing?

As previously outlined, multiple overarching theories may influence the moralization of effort across gender and contextual lines. The extant literature offers substantiation for several possible directions of effects, and our study may yield different outcome patterns.

These include the following: (1) A gender-based discrepancy in the moral evaluation of effort is observed in the domains of work and care work, (2) This discrepancy is only evident in the work context, (3) This discrepancy is only evident in the care context, (4) No differences in the moral evaluation of effort are found based on the gender of the actors.

The first pattern (1) would indicate that the gender of the actors in question does play a role in the moralization of effort and that stereotypical gender role expectations have an influence on the moral judgments of others across contexts. Within this pattern, different

directions of effects are imaginable. For example, in the work context, gendered stereotypes could lead to a higher moral judgement of men, despite their level of effort, because their presence at work is stereotypically assumed and valued, while women are considered less capable to perform in the work context (Rudman, 1998; Sterling & Reichman, 2016).

Conversely, the same stereotypes could potentially result in higher moral judgments for men in the high-effort condition but lower—compared to women—in the low-effort condition, as men are expected to demonstrate invested and agentic behavior at work. Consequently, demonstrating low effort could lead to lower moral judgments for men (Moss-Racusin et al., 2010).

Within the context of care, it is plausible that men will receive higher morality ratings in the high-effort condition compared to women, as the social expectations of women's prosocial behavior might render their high effort less exceptional. Consequently, even low-effort behavior exhibited by men might receive higher moral ratings than high-effort behavior displayed by women (Deutsch & Saxon, 1998). Conversely, while men might receive higher moral evaluation for high effort than women, low effort might be evaluated equally negatively across genders, as care work is expected and socially valued (Samtleben & Müller, 2022).

Naturally, it is also possible that the effects will be found in only one of the contexts eliciting the result patterns (2) or (3). This would suggest that the work or care context, respectively, is or has grown to be more resilient to stereotypical gender role expectations regarding effort moralization. For instance, differences may be found only in the care context, while gender stereotypes may not play a significant role for effort moralization in the work context (anymore). Alternatively, if no differences in effort moralization are identified in both contexts, as reflected by result pattern (4), the absence of effects could indicate neglectable influences of gender stereotypes on the moral judgment of effort.

#### **Current study**

The current project focused on three core aims: I) Toto test the replicability of the effort moralization effect and explore its generalizability to the care work context. II) Toto examine how the effort moralization effect interacts with gender across different contexts. and III) Toto investigate whether cooperation partner satisfaction differs by gender and effort.

#### Method

Note that all data is simulated in the stage 1 manuscript and will be replaced with the real data in the stage 2 manuscript

#### Sample and sample size

Using the smallest effect size of interest approach (Lakens, 2022b), we powered both studies to detect a small effect (Cohen, 1988) -in a 2X2 mixed ANOVA ( $\eta^2 = .01$ ,  $\alpha = .05$ , 1- $\beta$  = .95). This resulted in a minimum sample size of N = 324 per study, which we decided to oversample to N = 350 per study. We conducted a second power analysis for the interaction effect with the same parameters (d = 0.20), resulting in a similar required sample size (N = 325) to countercheck between computation tools. Hence, the total target sample size was N = 700. The computation was done using G\*Power 3.1.9.7 (Faul et al., 2009) and IntXPower (Sommet et al., 2023), documented in the supplemental material (https://osf.io/s8ec5/)<sup>1</sup>. Participants were recruited via Prolific and consisted of US participants individuals based in the US.

**Table 1**Descriptives by Study

	N	age: $M(SD)$	range	%female	Formatierte Tabelle
overall	321	68.14 (30.96)	18-120	25.50	-
Study 1 (work)	164	66.25 (29.78)	18-120	31.71	_
Study 2 (care)	157	70.12 (32.12)	18-120	19.11	

<sup>&</sup>lt;sup>1</sup> We are aware that some patterns of interaction terms potentially require larger samples. Given that the pattern is not known at this point, it can happen that some interaction forms might not be sufficiently powered through our sample.

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#### **Materials**

To build on previous research, we employed similar instruments and adapted prior vignettes to fit the current studies (Celniker et al., 2023). Specifically, we designed a new vignette tailored to the caregiving context and adapted the work vignette to feature less stereotypical tasks, aiming to minimize potential distortions through biases associated with traditional male or female roles (office instead of factory scenario). This was particularly important as we intended to include both male and female agents in the scenarios.

Building on previous research, we assessed the perceived morality of agents using 13 trait items (Celniker et al., 2023) that have been demonstrated to distinguish between two types of moral virtues (Piazza et al., 2014). While core goodness traits like kindness are universally good, the moral valence of value commitment traits like dedication depends on the context—a kind murderer is "better" than an unkind one, while a dedicated murderer is "worse" than an undedicated one. All trait items were rated on a 7-point scale.

Following the procedure of Celniker et al. (2023), warmth and competence, two universal dimensions of social cognition for anticipating interdependence and status, were assessed with one item each on a 7-point scale (Fiske et al., 2007).

The perceived effort, quality, difficulty, and work value were measured with single items rated on a 7-point scale. They served as manipulation checks.

The item assessing the pay deservingness of each agent differed between the work and care context study. In the work context study, participants responded on a sliding scale, anchored at a midpoint that reflected a realistic average office worker salary in the US. In the care context study, no reference point was provided given that this work is typically unpaid. Instead, participants could freely choose a salary between \$0 and \$50. This allowed us to assess the perceived value of care work. For estimating realistic salaries in the US we relied

on data shared on the webpage of the ERI Economic Research Institute (https://www.erieri.com).

Further, we assessed how satisfied participants would be on a 7-point scale to have either agent as an assigned cooperation partner in a work project (work context) or organizing a charity event (care context).

In addition, for exploratory purposes, we incorporated a short version of the gender role belief scale into our study to explore potential moderating effects of traditional gender role endorsement on effort moralization (Brown & Gladstone, 2012). All materials are available in the supplemental materials (https://osf.io/s8ec5/).

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Table 2

Overview of Measures

Construct ( <i>n</i> items)	Example item	Low anchor	High anchor Formatierte Tabell
core goodness (6) <sup>a</sup>	honest	does not describe X well	describes X extremely well
value commitment (7) <sup>a</sup>	dedicated	does not describe X well	describes X extremely well
competence/warmth (2) <sup>a</sup>	competent	does not describe X well	describes X extremely well
effort (1) <sup>b</sup>	How much effort do you think X puts into his/her (care) work?	no effort at all	a lot of effort
qual ty (1) <sup>c</sup>	In your opinion, how well does X perform his/her (care) work?	very bad	very good
difficulty (1) <sup>c</sup>	Compared to other jobs/ care work, how difficult is X's (care) work.	not at all difficult	extremely difficult
work value (1) <sup>c</sup>	How valuable do you think X's (care) work is?	not valuable at all	extremely valuable
pay deservingness (work) (1) <sup>a</sup>	The average office worker at the company makes \$24 an hour. How much do you think X should make per hour?	\$12	\$36
pay deservingness	Imagine that X was paid for his/her	\$0	\$50

(care) (1) <sup>a</sup>	care work. How much should s/he be paid per hour?		
collaboration partner choice (1) <sup>a</sup>	[] Please indicate how satisfied you would be to work with either X or Y?	extremely dissatisfied	extremely satisfied
gender role beliefs	Women with children should not work outside the home if they don't have to financially.	Strongly disagree	Strongly agree

*Note.* <sup>a</sup>These variables are the focal dependent measures, <sup>b</sup>This measure serves as manipulation check and exclusion criterion, <sup>c</sup>These measures serve as manipulation check but not as exclusion criterion.

#### **Procedure**

We conducted two independent studies to compare responses to a work vignette and a care vignette. The data was collected in two separate samples at month/year [Stage 2], with participants from one study being excluded from participating in the other. In both studies, after providing informed consent, participants were presented with a scenario from either the work or care context, depending on the study.

The vignettes featured two individuals—either male or female—who perform the exact same tasks at the same quality level but differ in the amount of effort required. For example, the work context vignette reads as follows<sup>2</sup>:

Anna and Sophie work at the same company and process similar orders in the company's office. Both Anna and Sophie are able to process approximately three orders per hour, which means they complete one case every 20 minutes. The average value of a completed case for the company is \$50.00. Quality control inspections indicate that 96% of Anna's and Sophie's

<sup>&</sup>lt;sup>2</sup> vignettes were designed to reduce stereotyped associations. Hence we adapted the vignette by Celniker et al. (2023) from a factory to an office setting and designed the care vignette in a way that non-relational tasks are in the foreground (e.g., lawn mowing instead of emotional support).

orders are error-free and complete. On average, Anna and Sophie each process correct orders worth \$144 per hour.

For Anna, processing orders requires minimal effort — although she works as quickly as possible, she finds the work easy.

For Sophie, however, processing orders requires a lot of effort — although she works as quickly as possible, she finds the work hard.

After reading the vignette, participants completed a series of dependent measures for each featured individual in randomized order. Subsequently, participants responded to the items constituting the short version of the gender role belief scale (Brown & Gladstone, 2012). Within each study, gender (male vs. female names in the vignette) served as the between-subject factor, and effort (high vs. low) was the within-subject factor.

Both studies took approximately 7 minutes per participant, and <u>all</u> data <u>werewas</u> collected via Prolific. Participants received compensation according to the platform's standard rates [in Stage 2].

### **Data cleaning**

We applied several measures to ensure high data quality. To ensure valid responses, participants who self-reported insufficient English proficiency (below "very good") were excluded. Participants who failed one of two attention checks embedded within the study were excluded from the analysis. The probability of passing both attention checks by random guessing was  $(\frac{1}{7} x \frac{1}{7} = )$  2.04%. Participants who completed the study 3 standard deviations (SD) faster than the average participant were excluded, as this can indicate insufficient attention to the task. There was no exclusion for slow participation. In line with the procedure by Celniker et al. (2023) and Tissot & Roth (2024) we further excluded participants who rated the low-effort condition as equally or more effortful than the high-effort condition.

Participants who did not complete the study were excluded from the final analysis. The number of exclusions by reason and sample is documented in the supplemental material [added in Stage 2].

# Data analysis

#### Aim 1: Replication of core effect

To test whether the original effort moralization effect could be replicated in the work context and generalized to the care context, we conducted a series of dependent, one-sided Welch's *t*-tests, comparing moral judgments of the described agents between high- and low-effort conditions. We further computed the respective effect size (Cohen's *d*) and Bayes Factor (BF<sub>10</sub>). Additionally, we compared perceived warmth, competence, and pay deservingness between high and low effort agents.

#### Aim 2: Moral character as a function of gender, context, and effort

To examine the effects of gender and effort on moral character judgments—in both work and care contexts—we used a mixed effect ANOVA (between-subjects factor: gender, within-subjects factor: effort) with an interaction term. For all terms, the respective Bayes Factor (BF<sub>10</sub>) was computed to quantify evidence of absence and presence of effects.

We applied the same mixed-effects ANOVA procedure to participants' suggested hourly payment to test for evidence of gender pay gaps.

# Aim 3: Cooperation partner satisfaction as a function of gender and effort

We used the same mixed-effects ANOVA procedure (as described in Aim 2) to compare satisfaction with assigned cooperation partners.

#### Results

Note that all data is simulated in the stage 1 manuscript and will be replaced with the real data in the stage 2 manuscript

While not part of the Stage 1 manuscript, we illustrate first plans for how to present the data after collection

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# **Aim 1: Replication of core effect**

We conducted a series of dependent, one-sided Welch's *t*-tests to test the replicability of the core effort moralization effect in the work context and the generalizability of the effect in the care context. [will be completed in Stage 2 manuscript].

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Table 3

Comparison of Moral Character Judgment by Effort and Context

	$\frac{1}{L}$ ow effort: $M$ ( $SD$ )	hHigh effort: M (SD)	d [95% CI]	$BF_{10}$ Form	natierte Tabelle
		work context			
core goodness	4.03 (0.82)	4.00 (0.76)	0.02 [-0.13, 0.17]	0.09	
value commitment	3.98 (0.73)	3.99 (0.76)	-0.01 [-0.16, 0.14]	0.08	
warmth	3.94 (2.07)	4.24 (1.96)	-0.10 [-0.25, 0.04]	0.21	
competence	3.84 (2.03)	4.13 (1.89)	-0.11 [-0.26, 0.03]	0.24	
pay deservingness	24.37 (7.09)	23.77 (7.07)	0.05 [-0.09, 0.21]	0.11	
cooperation	4.09 (1.98)	3.93 (2.04)	0.05 [-0.09, 0.21]	0.11	
		care context			
core goodness	4.08 (0.83)	3.95 (0.83)	0.10 [-0.04, 0.26]	0.26	
value commitment	3.97 (0.73)	4.08 (0.75)	-0.09 [-0.25, 0.05]	0.05	
warmth	4.22 (1.90)	3.91 (1.90)	0.11 [-0.04, 0.27]	0.27	
competence	4.14 (1.98)	4.00 (1.91)	0.05 [-0.10, 0.20]	0.20	

pay deservingness	25.85 (14.94)	26.62 (15.17)	-0.03 [-0.19, 0.12]	0.12	
cooperation	4.15 (1.96)	4.03 (1.90)	0.04 [-0.11, 0.19]	0.19	,

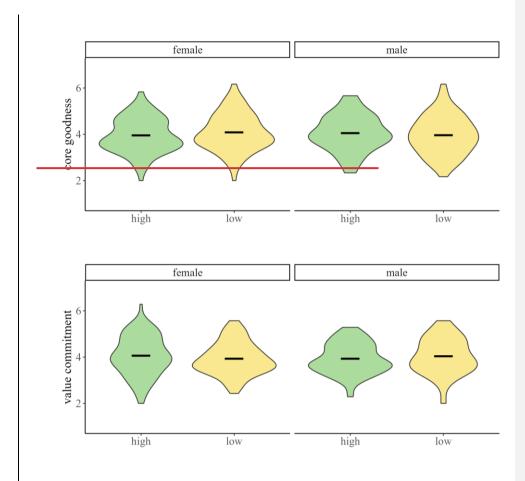
*Note.* \*p < .05, \*\*p < .01, \*\*\*p < .001, Cohen's  $d \ge .20$  (smallest effect size of interest) in **bold print**.

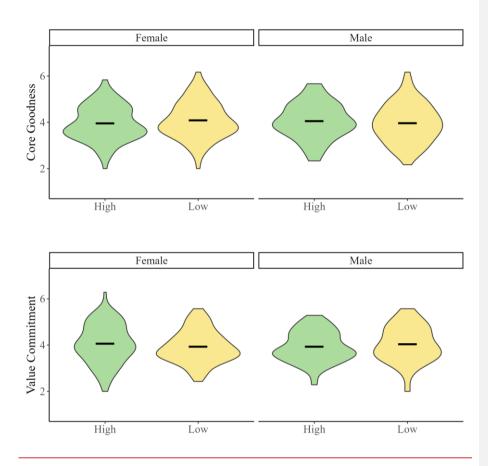
# Aim 2: Moral character as a function of gender, context, and effort

# work context

We fitted the 2x2 mixed ANOVA model (between: gender, within: effort), for which we further computed Bayes Factors.

**Figure 1**Work Context: Mean Differences in Moral Judgment by Effort and Gender



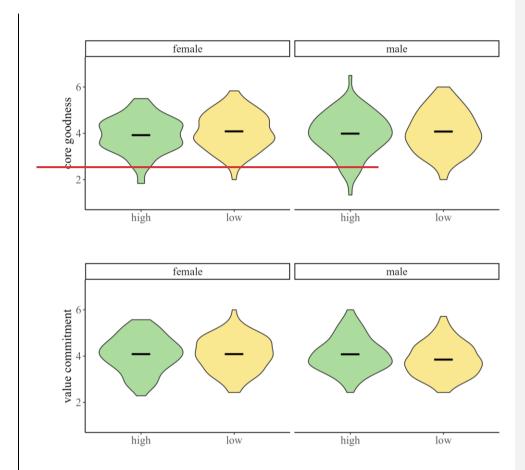


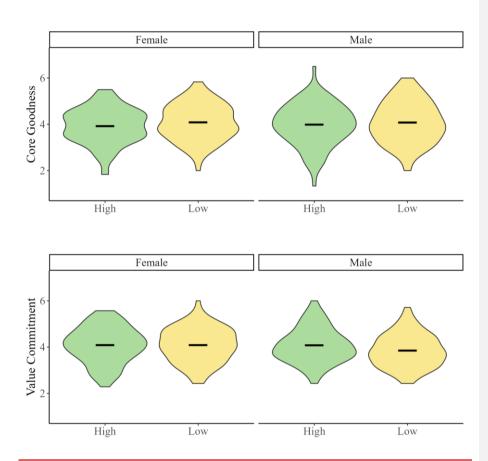
## care context

We fitted the 2x2 mixed ANOVA model (between: gender, within: effort), for which we further computed Bayes Factors.

Figure 2

Care Context: Mean Differences in Moral Judgment by Effort and Gender





Further, we assessed suggested hourly salaries in both contexts to test for gender effects and whether effort differentially affected these between genders. [will be completed in Stage 2 manuscript].

# Aim 3: Cooperation partner satisfaction as a function of gender and effort

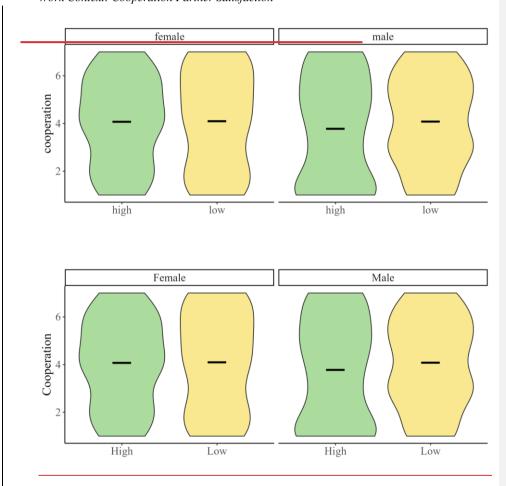
To test whether perceived effort influences the satisfaction with assigned partners in cooperation scenarios, we used <u>a mixed-effect ANOVA</u> to test the effect of effort (high effort/low effort) as a within-<u>subjects</u> factor and gender (female/male) as a between-<u>subjects</u>

factor. The analysis was conducted by context (work/care). [will be completed in Stage 2 manuscript].

# Work context

Figure 3

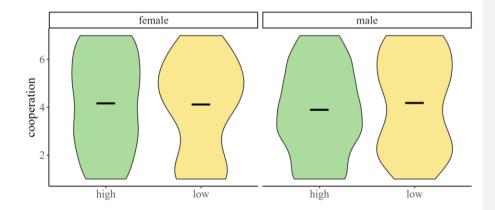
Work Context: Cooperation Partner Satisfaction

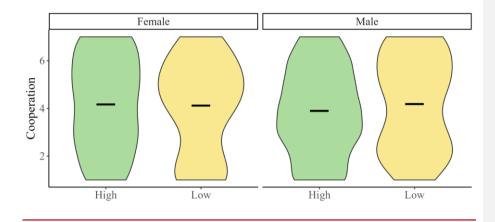


# Care context

Figure 4

Care Context: Cooperation Partner Satisfaction





Exploratory Analysis: are differences in effort moralization moderated by gender norm endorsement

**hat formatiert:** Schriftart: Fett, Englisch (Vereinigte Staaten)

**Formatiert:** Zeilenabstand: Doppelt, Keine Absatzkontrolle

# Discussion

Summary

Limitations

Conclusion

**Competing interests** 

The authors report no conflict of interest.

# Ethic approvement

The study was approved by the Departmental Review Board (DRB) of the Faculty of Psychology, Department of Occupational, Economic, and Social Psychology, University of Vienna (2024/M/009).

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