

Is it Worth the Hustle?

Stage 1

**Is it Worth the Hustle? A Multi-Country Replication of the Effort Moralization Effect
and an Extension to Generational Differences in the Appreciation of Effort**

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Is it Worth the Hustle?

Abstract

Inferring the character of individuals is an adaptive need for partner and mating decisions as well as to avoid harm. The effort moralization effect is the finding that people who exert more effort in a task are seen as more moral, even if higher effort does not enhance the outcome (e.g., higher performance or better quality). We aim to replicate this effect, based on Celniker et al. (~~2023, Study 6~~)(2023, Study 6), in countries not yet included in this ~~research~~study (Germany and Mexico). Furthermore, drawing on discussions around workforce participation (see ‘great resignation’, or ‘quiet quitting’) that criticize the supposedly lower work ethic of younger individuals (e.g., the so-called Gen Z), we will examine whether lower effort moralization ~~is observed as a function of age (including non-linear terms)-depends on~~ participants age. This will allow us to examine whether younger generations do indeed moralize ineffective effort less than older generations.

[remainder will be completed in Stage 2]

Keywords: Registered Report, Effort moralization, Generation effect, Replication, Multi-country, Work ethic

Is it Worth the Hustle?

PCIRR-Study Design Table

Table 1

PCI-RR Design Table

Question	Hypothesis	Sampling plan	Analysis plan	Rationale for sensitivity	Interpretation given different outcomes	Theory that could be shown wrong by the outcomes
Can the effort moralization effect be replicated in the overall sample?	Participants will rate the person, showing high-effort behavior, as more moral, even though the added effort doesn't increase the productivity or quality	We will use the services of online panel providers (e.g., Prolific) as well as social media sampling to reach a total sample of 680 complete cases (340 per country) to have at least $N = 327$ valid cases (passing	We will use two-sided dependent t-tests on the pooled data as well as by country to test the differences in moral evaluation (core goodness and value commitment) by effort condition and differences in	We aim for a sensitivity of $d = 0.20$ as the smallest effect of interest. Targeting a power of .95 , a respective minimum sample size of $N = 327$ was computed. We plan to oversample every country to 340 to	We will use the criteria by LeBel et al. (2019) to evaluate the replication, utilizing the reported $d = 0.42$ from Celniker et al. (2023, p.73, study 6) for core goodness and $d = 0.76$ for value commitment.	Effort moralization theory's generalizability could be shown undetectable under the current conditions of the study

Is it Worth the Hustle?

	<p>These effects will be found in every by-country analysis</p>	<p>exclusion criteria) by country. We will aim to achieve a roughly equal distribution of participants in the following age groups: 18 – 30, 31 – 45, 46 – 60, > 60 years</p> <p>We will fill the sample in other groups if the sample in a respective age group is not completed within 3 weeks after the beginning of data collection.</p>	<p>deserved pay by effort condition. We will further test differences in perceived warmth and perceived competence. Yet, prior research indicated variance of effects between countries here.</p>	<p>compensate for potential exclusions. Power analysis was conducted, using G*Power 3.1.9.7 [see supplemental material].</p>	<p>This will be done, using the criteria signal, consistency, and direction.</p> <p><u>We will use the criteria by LeBel et al. (2019) to evaluate the replication, utilizing the reported $d = 0.42$ from Celniker et al. (2023, p.73, study 6) for core goodness and $d = 0.76$ for value commitment. This will be done, using the criteria signal, consistency, and direction.</u></p>	
<p>Does the strength of the effort moralization effect depend on the age of the evaluator in situations where further effort does</p>	<p>The effort moralization effect will be predicted positively by the age of the participants (higher age, stronger effect).</p>		<p>We will extend the analyses regarding the previous hypothesis by conducting by-country regression analyses with age as</p>	<p>To detect the smallest effect of interest of $R^2 = .15$ with one predictor, power = .95 and $\alpha = .05$, a minimum sample size of $N =$</p>	<p>If the effect is significant, pointing in the expected direction and of expected magnitude in all countries, we interpret the effect</p>	<p>The idea that effort moralization is less expressed in younger participants could be shown to be undetectable under the current</p>

Is it Worth the Hustle?

<p>not improve the quality of the outcome?</p>	<p>Pay deservingness differences by condition will be predicted positively by the age of the participants (higher age, higher deservingness).</p>		<p>predictor and the discrepancy in moral evaluation, and deserved pay between ratings as dependent variables.</p>	<p>76 complete and valid cases by countries is required. As described above, we aim to sample 340 complete cases per country.</p>	<p>as generalizable to all respective countries</p> <p>If the effect is only observed in one of the countries, it is not generalizable to all sampled countries</p> <p>If the effect is never observed, the effect cannot be assumed under the given conditions</p>	<p>circumstances or not generalizable across all investigated countries</p>
	<p>These effects will be found in every by-country analysis</p>					

Introduction

'It seems like nobody wants to work these days.' (Kardashian, K. in Variety, 2022).

—The ideological debate about the lack of qualified workforce and specifically younger potential employees has become a common theme of the news (Medlar et al., 2022). While there is a series of objective reasons that reduce the supply of workforce to certain fields, such as demographic changes, stagnating wages, working conditions, and delayed effects of the COVID-19 pandemic (Mūrage et al., 2022; Pillai, 2023; Silverstein, 2008; Smith, 2022), debates often focus on constructs like 'work ethic' or 'laziness' and commonly target the youngest generation in the workforce (Formica & Sfodera, 2022). While the idea that younger generations are lazy and morally inferior to preceding generations is a recurring theme throughout history, perspectives on work are indeed changing, leaving companies with potential employees who are less willing to provide unpaid services or excessive overtime (Chillakuri, 2020; Xueyun et al., 2023).

—One avenue to approach this topic is the so-called effort moralization effect (Bigman & Tamir, 2016; Celniker et al., 2023), which describes the translation of observed behavioral effort into a moral judgment of the agent. An effect that persists even if the effort is not productive (Celniker et al., 2023). Regarding the above-described debates, we hypothesize that younger individuals show less effort moralization of ineffective labor — not judging higher, ineffective effort as a sign of higher morality. We hence aim to replicate the findings by Celniker et al. (2023, Study 6) in two countries (Mexico and Germany) and test whether participants' age explains differences in the effort moralization effect. This offers a new perspective on debates around the supposedly lower 'work ethic' of younger generations.

Is it Worth the Hustle?

~~Impressions of character as a function of behavior~~

~~To infer character values of new encounters is an adaptive and inherent behavior, concerning philosophy and psychology for the longest (Doris & The Moral Psychology Research Group, 2010). Several philosophical traditions suggest that morality can be inferred only from the actions of individuals (Fengyan, 2004; Johnson & Cureton, 2004; Telfer, 1989). Indeed, for many social decisions we rely on moral judgments—an often automatic process by which we form impressions about the morality of others' behavior (Uhlmann et al., 2015). This is crucial to select romantic partners (Brown et al., 2022; Chan, 2023; Oda & Hayashi, 2020) as well as in cooperation settings (Celniker et al., 2023; Everett et al., 2016; Van Lange & Kuhlman, 1994).~~

~~The estimation of future moral behavior is by nature not trivial, which is illustrated by the multitude of models and measures around moral foundations, moral identity, virtue, or similar ideas (Aquino & Reed, 2002; Haidt & Joseph, 2008; Ruch et al., 2010; Schlenker, 2008). Still, most individuals depend on approximations of character virtue through observation in daily life. While individuals rely on a variety of cues for this purpose, including facial and body expressions (Horberg et al., 2013), stereotypical appearance (Grizzard et al., 2018), or religious beliefs (Gervais, 2011), one of the main signals for inferring the morality of others remains behavioral observation (Mickelberg et al., 2022; Pizarro & Tannenbaum, 2012). Naturally, these require some sort of quantification to tell, how moral a person is, based on mostly trivial actions.~~

Is it Worth the Hustle?

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The ideological debate about the lack of qualified workforce and specifically amongst younger potential employees has become a common theme of the news (Medlar et al., 2022). While there is a series of systemic reasons that reduce the supply of workforce to certain fields, such as demographic changes, stagnating wages, working conditions, and delayed effects of the COVID-19 pandemic (Mūrage et al., 2022; Pillai, 2023; Silverstein, 2008; Smith, 2022), debates often focus on constructs like 'work ethic' or 'laziness' and commonly target the youngest generation in the workforce (Formica & Sfodera, 2022). While the idea that younger generations are lazy and morally inferior to preceding generations is a recurring theme throughout history, perspectives on work are indeed changing, leaving companies with potential employees who are less willing to provide unpaid services or excessive overtime (Chillakuri, 2020; Xueyun et al., 2023). One avenue to approach this topic is the so-called effort moralization effect (Bigman & Tamir, 2016; Celniker et al., 2023), which describes the translation of observed behavioral effort into a moral judgment of the agent. This effect persists even if the effort is not productive (Celniker et al., 2023). The effort moralization effect can inform the debate around the lack of qualified and willing workforce. We hypothesize that younger individuals indicate less effort moralization of ineffective labor. Younger individuals do not judge ineffective effort as a sign of higher morality based solely on the effort. We hence aim to replicate the findings by Celniker et al. (2023, Study 6) in two countries (Mexico and Germany) and test whether participants' age explains differences in the effort moralization effect. Replicating the effort moralization effect offers a new perspective on debates around the supposedly lower 'work ethic' of younger generations.

Is it Worth the Hustle?

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To attribute morality to others, most individuals depend on approximations of character virtue through observation in daily life. While individuals rely on a variety of cues for this purpose, including facial and body expressions (Horberg et al., 2013), stereotypical appearance (Grizzard et al., 2018), or religious beliefs (Gervais, 2011), one of the main signals for inferring the morality of others remains behavioral observation (Mickelberg et al., 2022; Pizarro & Tannenbaum, 2012). Observations lead to create inferences about the morality of a person based on trivial actions.

The Moralization of Effort

~~One phenomenon that has raised scientific psychology's interest in recent years is the observation that~~The effort moralization effect describes one process of moral judgement. It describes how people appear to use effort invested in given tasks as information on the morality of agents ~~summarized as effort moralization effect. While the,~~The core idea ~~likely follows of~~the moralization of effort is a heuristic the heuristic of higher effort resulting in higher performance. ~~†~~The focal interest in the effect concentrates on a special case of effort moralization: when effort makes no difference in the outcome.

Is it Worth the Hustle?

Bigman and Tamir (2016) delivered foundational insights into this effect across seven studies. These showed that perceived effort intensified judgments of both immoral and moral agents (e.g., higher effort on moral behavior led to higher moral judgment of the described person). This was still observed when the behaviors were not successful (e.g., returning a found wallet). Further research suggested that effort moralization follows certain norms as boundary conditions (Berry & Lucas, 2022). In four studies, it was shown that the effort moralization effect does not linearly increase character judgment but plateaus when agents recruit 'excessive' effort that reaches beyond societal standards of effort investment (e.g., revisiting the spot of the found wallet three days in a row). Celniker et al. (2023) tested the effort moralization effect across eight studies ruling out potential biases such as differences in quality of work or effort withholding. Further, they reported that participants were more likely to choose individuals who invested higher effort in a task as cooperation partners even when the behavior did not lead to better or more outcomes. This finding is similar to Barclay's (2013) remarks on the nature of altruism, which is thought to be expressed in order to be seen as a more attractive option in the market of available cooperation partners. Research on the 'martyrdom effect' finds that people report greater willingness to donate to a charitable cause when the contribution process is expected to be effortful rather than easy (Olivola & Shafir, 2013). Thus, the expression of effort despite being an inconsistent indicator of ability or productivity (Markovits, 2019; Shepperd et al., 1994) seems to be utilized as a heuristic signal for judgment of character as well as cooperation intentions.

Changes in effort valuation at work

As described above, older generations accusing younger generations of being 'lazy' is not a new phenomenon (Lang, 2023; Royle, 2024). While such perceptions of perceived freeloaders activate strong social emotions (Petersen et al., 2011, 2012) there is little evidence

Is it Worth the Hustle?

~~of generational differences in actual productivity. Yet, recent developments in labor markets as well as employee values appear to indicate some real changes in the perception of effort at work (see ‘great resignation’ or ‘quiet quitting’). These trends imply that certain sections of today’s workforce are tired of meaningless work and are striving for change (Medlar et al., 2022). We suggest that generational differences in the moralization of effort may help explain shifts in work values among younger generations that lead to conflicts with established norms.~~

~~Celniker and colleagues (2023) discuss effort moralization as a ‘deeply rational’ heuristic process (Kenrick et al., 2009), that enables individuals to easily incline cooperative intent and facilitates social decision making and judgments of moral character (Celniker et al., 2023). Such heuristics reduce decision-making effort and required time. However, even though such mechanisms might prove fruitful on the individual level, they might lead to harmful norms on a societal level (Li et al., 2018). For instance, Celniker et al. (2023) theorize that effort moralization might explain the maintenance of virtue signaling by engaging in unproductive work. Virtue signaling aims to enhance one’s moral reputation by publicly displaying actions that are socially perceived as moral, while the motivating source for this is status seeking and not the moral expression itself (Westra, 2021). Signaling morality through (ineffective) effort might also foster resistance to less effortful processes or automated alternatives, and to policies that promote alternatives to economically redundant labor, such as universal basic income (Celniker et al., 2023). It is plausible to assume that recent movements such as the ‘great resignation’, ‘quiet quitting’, etc. represent responses to such resistance, fueled by a generational shift in work values and changing perceptions of (necessary) effort among younger generations.~~

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Is it Worth the Hustle?

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Is it Worth the Hustle?

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We hypothesize that variations in the moralization of effort across age groups may explain these changes. Such differences provide a better understanding of social movements than the popular (and unsubstantiated) notion that young people are inherently lazier than

Is it Worth the Hustle?

previous generations. Younger generations may view unproductive work differently than older generations, which may explain their tendency to reject work they consider unproductive. Consequently, our research seeks to contribute to the ongoing discussion about workforce participation.

Replication and Extension

The current study aims to replicate and extend the original findings by Celniker et al. (2023), specifically Study 6. The procedure included one vignette describing two workers, controlling for economic output, quality, and working on maximum capacity, and all earlier discussed possible biases in effort moralization (e.g., the output is identical, but the quality is higher, when the effort is higher; the low effort individual is withholding effort by working slowly; etc.). Only the required effort for the work differs between the described workers. Note, that we focus on the focal effort moralization effect and don't test the second part of the experiment about preferred cooperation partners. We further apply the same measures for perceived moral virtue, separated by core goodness and commitment (see Piazza et al., 2014). While we replicate the procedure of Celniker et al. ~~(2023)~~(2023), we will test the effect in countries that to our knowledge have not been included in earlier effort moralization research (Germany and Mexico¹) ~~to evaluate the~~. Testing the effect in different countries will inform its generalizability of the effect. Celniker et al. (2023) ~~demonstrated~~ in Studies 2a-c that the magnitude of the effect may differ between populations (France: $d = 0.38$, South Korea: $d =$

¹ Both countries are important economic entities in their respective region and have a combined population of > 200 mio. Further, the authors had the language abilities necessary for the translation process.

Is it Worth the Hustle?

0.71, United States of America: $d = 0.60$; see also [Tierney et al., 2020](#)~~Tierney et al., 2020~~, for cross-national evidence of similar effects).

We will further extend the available evidence by testing potential differences in effort moralization by participants' age. If younger individuals are less prone to moralize unproductive effort, the effect should be observable as a function of age. We will test this using age as a continuous (non-)linear predictor of the magnitude of effort moralization.

Deviations

We will deviate from the original study (~~Celniker et al., 2023~~)(Celniker et al., 2023) in three aspects. We will not apply the second part of the experiment (choice of cooperation partner), and neither assess ethnicity nor income.

Is it Worth the Hustle?

Method

Important links

The table below includes all necessary links to access the materials of the study.

Table 2

Summary of links to materials, code, data, and supplemental material

content	link
code and data (GitHub)	https://github.com/rothl16/mev
project (OSF)	https://osf.io/k3f4y/
code and data (OSF)	https://osf.io/zcq7m/?view_only=d59a57c6f8af4f05ba90f1c445639b1f
supplemental material (OSF)	https://osf.io/jxecn/?view_only=e3d2187196684f15b696be7625f3210c
Qualtrics (OSF)	https://osf.io/98p7r/?view_only=5c77775d4d314e7397c78dee29dc3b6b

Open Science

All materials, code, and data will be made openly accessible [OSF link] except data, which can identify individuals, such as mail addresses.

Power computation

The power computation for mean differences was based on the smallest effect size of interest ($d = 0.20$) (Lakens, 2022)(Lakens, 2022). The smallest effect, reported by Celniker et al. (2023), critical for our study was $d = 0.42$, quantifying differences in moral judgment (core goodness). We used G*Power 3.1.9.7 (Faul et al., 2009)(Faul et al., 2009) to compute the required minimum sample size to detect the effect, using a dependent two-sided t-test ($1-\beta = .95$, $\alpha = .05$) resulting in a minimum sample size of $N = 327$ by country. The sample size for the regressions, used for the effect of age on effort moralization was computed, using the *pwrss*-package (Bulus, 2023)(Bulus, 2023) ($N = 76$ per country). Both computations are documented

Is it Worth the Hustle?

in the supplemental material. We decided to oversample the number of complete cases to 340 by country to compensate for possible exclusions (see Data cleaning).

Data collection

As the study aims to test for age effects, we tried to reach approximately equal cell sizes within each country by the following branches: 18 – 30; 31 – 45; 46 – 60; > 60. If one cell was not filled after three weeks of data collection, the next highest cell was oversampled to the by-country sampling goal. We offered a voucher of 50€/ 250 MXN as a possible prize for participating in the study to collect data on social media in Germany and Mexico and complete the cell sizes through Prolific. Individuals participating via Prolific received a compensation of £0.5 for completing our study.

Data cleaning

We applied a series of measures to ensure high data quality. Participants, indicating a respective language proficiency level below 'very good' (Germany: German, Mexico: Spanish) were excluded from participation in the study as well as participants who indicated not to currently live in the respective target country. Participants, failing one of the two attention checks distributed across the experiment were excluded from the analysis (labeled with AC in the materials, e.g., please choose 'describes him very well'). The chance of correctly solving both attention checks at random filling behavior was $\frac{1}{7} \times \frac{1}{7} = 2.04\%$. We excluded participants who completed the study three standard deviations (SD) faster than the average by country or who did not complete the study. There was no exclusion for slow participation. Following the procedure by Celniker et al. (2023), we further excluded all participants who rated the low-effort condition as equally or less effortful compared to the high-effort condition as a

Is it Worth the Hustle?

manipulation check. The number of exclusions by reason and sample is documented in the supplemental material [link supplemental material].

Samples

We collected data from two countries, where, to our knowledge, the effort moralization effect hasn't been studied (Germany and Mexico). We aimed to collect 340 complete cases per country. Table 3 gives an overview of the collected data (at the moment the content is based on simulated test responses).

Table 3

Overview of samples and demographic properties

	sampling period	sampled/valid	Age M (SD)	min	max	med	f/m/o
Germany	mm.yy. – mm.yy.	xxx/xxx	69.25 (30.26)	19	120	68	29/28/57
Mexico			72.4 (30.96)	20	120	74.5	38/29/59
overall			70.91 (30.61)	19	120	70	67/57/116

Procedure

After completing an informed consent form, participants were informed that they would be presented with a scenario on the following page, followed by several questions about the actors depicted in these scenarios. The vignettes used in this study were adopted from Celniker et al. (2023, Study 6). They feature two employees, Marc and Justin, who work in a widget factory and have identical jobs. On the next page, participants read character descriptions, one of the low-effort target (Justin) and one of the high-effort target (Mark). The vignette reads as follows:

Is it Worth the Hustle?

Justin and Mark work in the same factory and make the same widgets. Both Justin and Mark are able to produce approximately six widgets per hour, one widget around every 10 minutes. The market value for these widgets is \$4.00. Quality control inspections indicate that 96% of Justin's widgets and 96% of Mark's widgets work flawlessly, which means they can be sold. Thus, in an average hour, both Justin and Mark are able to produce \$23.04 worth of high-quality widgets. For Justin, making widgets requires minimal effort—although he works as quickly as possible, it is easy work. For Mark, making widgets requires a lot of effort—although he works as quickly as possible, it is hard work.

Participants completed separate sets of dependent measures for each target in randomized order after reading the vignette. ~~Because we were conducting the study in Germany and Mexico, we~~We translated the vignettes to the respective languages using a team translation approach ~~(Behr & Braun, 2023)~~(Behr & Braun, 2023). We worked closely with native speakers of the respective languages (German and Spanish). The questionnaire was translated into each language by two independent translators, ~~including one of whom was one of the two authors~~author of this paper ~~and the other a native speaker of the target language~~. The initial translations were then thoroughly discussed in joint review sessions between the two authors and the native speakers until a consensus on the final translation was reached. To ensure not only a correct translation but also an appropriate adaptation to the target countries, we considered the choice of wording, names, currency, and product values of the respective countries.

Measures

To replicate Celniker et al. ~~(2023)~~(2023) we employed identical instruments (study 6). Table 4 summarizes the employed concepts with example items and measurement anchors. All items were measured on 7-point scales, except for one item that asked about the deserved pay

Is it Worth the Hustle?

for each actor in the used scenario. For this item, participants responded on a sliding scale, anchored at a midpoint that was based on a realistic average salary in the respective countries where we conducted our study. For estimating realistic salaries in the target countries we relied on data shared on the webpage of the ERI Economic Research Institute (<https://www.ერი.com>).

Table 4

Overview of measures

Construct	N items	Example item	Low anchor	High anchor
core goodness ^a	6	honest	does not describe X well	describes X extremely well
value commitment ^a	7	dedicated	does not describe X well	describes X extremely well
competence ^a / warmth ^a	2	competent	does not describe X well	describes X extremely well
deserved salary ^a	1	How much do you think X should make per hour?	Germany: 6 €; Mexico: \$30	Germany: 18 €; Mexico: \$90
perceived effort ^b	1	How much effort do you think X puts into his work?	no effort at all	a lot of effort
quality of work ^c	1	What quality of widgets do you think X produces?	very low quality	very high quality
job difficulty ^c	1	Compared to other jobs, how difficult is X's job?	not at all difficult	extremely difficult
work value ^c	1	How valuable do you think X's work is?	not valuable at all	extremely valuable

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

Reliabilities by effort condition, country, and dimension can be found in the supplemental material.

Is it Worth the Hustle?

Data analysis

Replication of effort moralization effect

To test ~~whether~~ the effect-signal consistency of the effort moralization ~~was replicated~~ effect between the original study and the replication, we conducted mean comparisons across the entire sample ($N =$ [add in Stage 2]) and by country. While having directional assumptions for effects in perceived morality (higher effort: higher morality and higher deservingness), prior research has shown between-country variance (e.g. [Celniker et al., 2023, Study 2a-e](#)) ~~Celniker et al., 2023, Study 2a-c~~). We therefore aimed for a considerably lower effect size, to reach adequate sensitivity ($d = 0.20$). To quantify the results, we computed Cohen's d with its respective 95% confidence interval as well as the log-transformed Bayes Factor.

Evaluation of replication

We used the criteria by LeBel et al. (2019) with the original effect size of $d = 0.42$ for core goodness and $d = 0.76$ for value commitment (Celniker et al., 2023, p. 73, right column) as a reference. The criteria include the dimensions signal (was a significant result detected?), consistency (is the original effect size within the confidence interval of the current estimate?), and direction (is the effect smaller, larger, or opposite?).

Extension to age as a predictor of effort moralization

To test the hypothesis that effort moralization is an age-dependent effect with possible variations between countries, we ran a series of regression models (overall and by country) with the difference of moral judgment between the vignettes by participant as dependent variable (Δ high effort, low effort), predicted by age (linear and quadratic term) as a continuous measure.

Is it Worth the Hustle?

To quantify the evidence, we report the adjusted R^2 as well as the log-transformed Bayes Factor, compared to the null model (for the linear model) and against the linear model (for the quadratic model). Additionally, we ran an exploratory random-effects multi-level model, including fixed effects interactions of country and age⁽²⁾ as well as random intercepts for country along random slopes for age.

Summary of hypotheses

Table 5 summarizes the key hypotheses of the current Study. Note that it does not include assumptions for perceived warmth and perceived competence, as prior Studies showed incoherent results. Further, we have no specific hypothesis on the superiority of a non-linear quadratic model above the linear model. Hence, the table only includes the hypothesis, that both models outperform the null model.

Table 5

Specific hypotheses tested

ID	hypotheses
1	investing more effort will be judged as more moral by participants
2	investing more effort leads to judgment of higher pay deservingness
3	age predicts the effort moralization effect positively

We have no a priori assumptions on between-country differences and hence expect the same effect in each country as well as in the overall sample.

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Results

[the results are written, based on simulated test responses and will change when replaced with the actual data, as well as the interpretation]

Manipulation checks and exclusion criteria

Out of the initial [add in Stage 2] participants, $N =$ [add in Stage 2] participants remained in the final sample. Country-specific sample sizes can be retrieved from Table 3. Across samples, there was no significant difference in perception of work quality ($p = .380$, $d = -0.057$, 95% CI [-0.183, 0.070], $BF_{10} = 0.106$), difficulty of the job ($p = .159$, $d = 0.091$, 95% CI [-0.036, 0.218], $BF_{10} = 0.193$), or value of the product ($p = .831$, $d = 0.014$, 95% CI [-0.113, 0.140], $BF_{10} = 0.074$). The by-country analysis can be found in the supplemental material.

Replication of effort moralization effect

[this will be written under the impression of the results]

Table 6

Within-subject effort moralization effect by low/high effort case (core goodness)

	<i>M (SD)</i>	<i>M (SD)</i>	<i>p</i>	<i>d</i>	<i>CI_{low}</i>	<i>CI_{high}</i>	<i>Log(BF₁₀)</i>	<i>replication</i>
Global sample	3.91 (0.75)	4.00 (0.78)	.161	-0.091	-0.218	0.036	-1.653	ns
Germany	3.94 (0.72)	3.90 (0.76)	.673	0.04	-0.144	0.223	-2.177	ns
Mexico	3.87 (0.78)	4.08 (0.78)	.023	-0.205	-0.381	-0.029	0.235	s - i - o

Note. ns = no signal; s = signal; i = inconsistent; o = opposite; reference effect: $d = 0.42$.

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Table 7

Within-subject effort moralization effect by low/high effort case (value commitment)

	<i>M (SD)</i>	<i>M (SD)</i>	<i>p</i>	<i>d</i>	<i>CI_{low}</i>	<i>CI_{high}</i>	<i>Log(BF₁₀)</i>	<i>replication</i>
Global sample	3.98 (0.76)	4.00 (0.71)	.795	-0.017	-0.143	0.11	-2.594	ns
Germany	4.00 (0.8)	3.85 (0.69)	.103	0.154	-0.031	0.338	-0.957	ns
Mexico	3.96 (0.73)	4.13 (0.71)	.068	-0.164	-0.34	0.012	-0.671	ns

Note. ns = no signal reference effect: $d = 0.76$.

Table 8

Within-subject difference in pay deservingness by low/high effort case

	<i>M (SD)</i>	<i>M (SD)</i>	<i>p</i>	<i>d</i>	<i>CI_{low}</i>	<i>CI_{high}</i>	<i>Log(BF₁₀)</i>
Global sample	35.33 (25.76)	36.28 (26.32)	.431	-0.051	-0.177	0.076	-2.32
Germany	12.02 (3.68)	11.95 (3.53)	.886	0.013	-0.17	0.197	-2.254
Mexico	56.43 (17.67)	58.29 (16.87)	.407	-0.074	-0.249	0.101	-1.975

Table 9

Within-subject difference in perceived warmth by low/high effort case

	<i>M (SD)</i>	<i>M (SD)</i>	<i>p</i>	<i>d</i>	<i>CI_{low}</i>	<i>CI_{high}</i>	<i>Log(BF₁₀)</i>
Global sample	4.11 (2.03)	4.12 (1.98)	.964	-0.003	-0.129	0.124	-2.627
Germany	4.04 (2.06)	4.13 (1.94)	.733	-0.032	-0.216	0.152	-2.207
Mexico	4.17 (2.00)	4.10 (2.02)	.767	0.026	-0.148	0.201	-2.269

Table 10

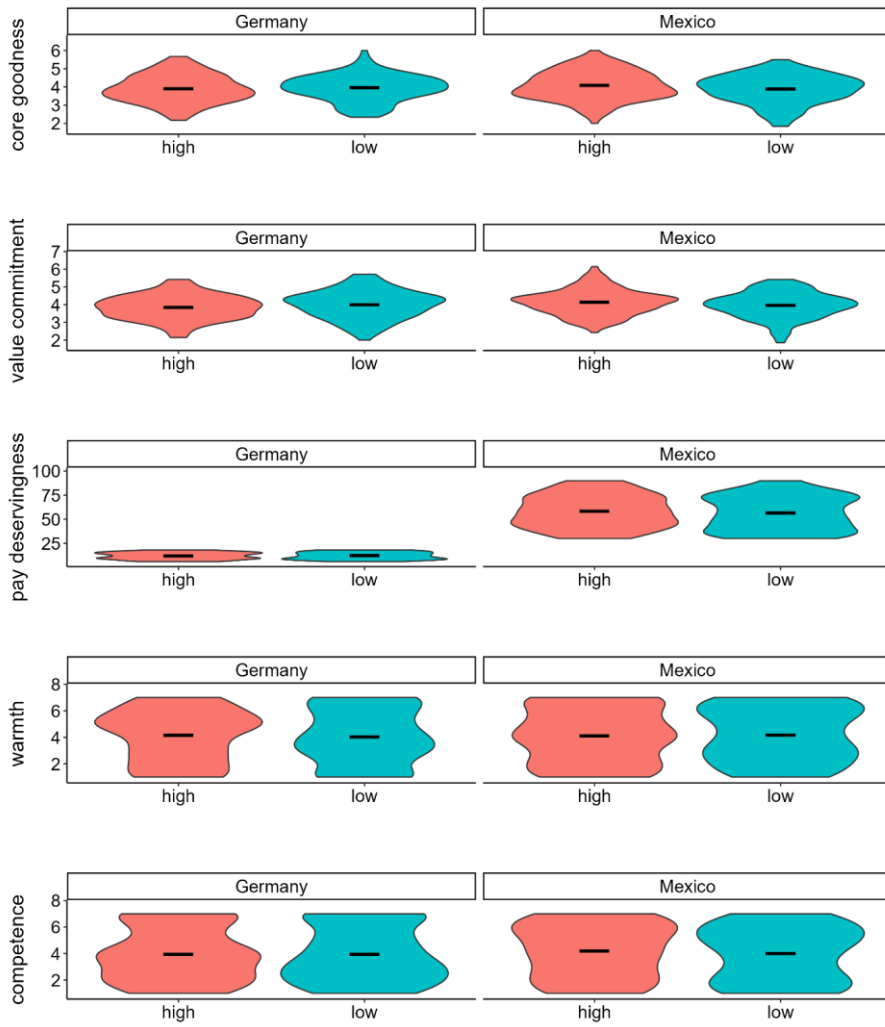
Within-subject difference in perceived competence by low/high effort case

	<i>M (SD)</i>	<i>M (SD)</i>	<i>p</i>	<i>d</i>	<i>CI_{low}</i>	<i>CI_{high}</i>	<i>Log(BF₁₀)</i>
Global sample	3.97 (2.03)	4.07 (1.99)	.568	-0.037	-0.163	0.09	-2.467
Germany	3.93 (2.06)	3.94 (1.99)	.974	-0.003	-0.187	0.18	-2.264
Mexico	4.00 (2.01)	4.19 (1.99)	.45	-0.067	-0.242	0.107	-2.032

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Figure 1

Distribution plots of data with mean by variable and group



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Extension to age as a predictor of effort moralization

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Table 11

Explanatory value of age on effort moralization effect (core goodness)

	β	95% CI	p	$R^2_{adj.}$	Log(BF ₁₀)
Global sample					
age	-.05	-.18 – .07	.398	-.001	-2.379
age ²	.08	-.07 – .24	.268	-.000	-2.116
Germany					
age	-.02	-.21 – .17	.844	-.009	-2.348
age ²	.24	.02 – .47	.030	.025	0.055
Mexico					
age	-.10	-.28 – .08	.274	.002	-1.806
age ²	-.05	-.25 – .16	.664	-.005	-2.321

Table 12

Explanatory value of age on effort moralization effect (value commitment)

	β	95% CI	p	$R^2_{adj.}$	Log(BF ₁₀)
Global sample					
age	-.06	-.18 – .07	.381	-.001	-2.352
age ²	.02	-.13 – .17	.760	-.005	-2.693
Germany					
age	-.07	-.26 – .12	.469	-.004	-2.100
age ²	-.08	-.31 – .14	.476	-.009	-2.109
Mexico					
age	-.06	-.24 – .11	.489	-.004	-2.161
age ²	.10	-.11 – .30	.361	-.005	-1.989

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Discussion

Summary

The present study aimed to replicate and extend prior work on the effort moralization effect, which describes the attribution of moral value to individuals, based on the observed effort, they recruited. Critically, this was earlier observed even in situations, in which bespoke effort did not change the outcome of the action. We utilized an earlier research design by [\(Celniker et al., 2023\)](#)~~(Celniker et al., 2023)~~ to replicate the effect in countries, which haven't been subject to these observations. Further, we applied the theoretical concept of effort moralization to a current debate, held in public discourses around the world, often termed as 'the mass resignation' or 'quiet quitting'. These describe neighboring phenomena of individuals leaving specific fields of the workforce or reducing their efforts to the amount of work, agreed on in the contract. This was done by testing, whether the age of participants was related to a smaller effort moralization effect.

[this will be written under the impression of the results]

Replication evaluation

[this will be written under the impression of the results]

Extension evaluation

[this will be written under the impression of the results]

Limitations

[this will be written under the impression of the results]

Future directions

Is it Worth the Hustle?

[this will be written under the impression of the results]

Conclusion

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Ethics

The study was approved by the Departmental Review Board (DRB) of the Faculty of Psychology, Department of Occupational, Economic, and Social Psychology (2024/M/001).

Conflict of interest

The authors report no conflict of interest

Monetary Support

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