

# Connecting the Dots: Superordinate Framing Enhances the Value of Unimportant Tasks

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**Abstract**

Each day, people begrudgingly complete mundane tasks. Four experiments ( $N = 3,502$ ; two pre-registered) reveal that a simple intervention—*superordinate framing*—can enhance people’s task experiences. In two initial experiments, working adults were asked to describe unimportant, meaningless work tasks. Some participants reflected on how these tasks acted like puzzle pieces, connecting with other tasks to achieve a broader purpose (superordinate condition). Others reflected on the broad purpose of the unimportant task (purpose condition) or were assigned to a no-framing control condition. Participants in the superordinate condition reported greater joy, meaning, and motivation from the task compared to participants assigned to the purpose or control conditions (Experiments 1-2). This effect was moderated by task type, such that superordinate (vs. purpose) framing increased the enjoyment of unimportant but not important tasks (Experiment 2). Two additional experiments replicated these findings using real-time work tasks, and generalized to two kinds of superordinate frames: superordinate framing enhanced participants’ task experience regardless of whether they reflected on how their own tasks fit together over time (i.e., how their work now will combine with their own future work) or how their own tasks fit with others’ tasks (i.e., how their work will combine with others’ work; Experiments 3-4). Participants who viewed their task through a superordinate lens also demanded a higher wage for participation—providing further evidence that they valued these tasks more (Experiment 4). These findings highlight a costless psychological intervention that can boost people’s enjoyment of otherwise mundane and demotivating tasks. (248 words)

**Keywords:** superordinate framing; work enjoyment; meaning; motivation; connection

Word Count: 5032

## SUPERORDINATE FRAMING

### **Connecting the Dots: Superordinate Framing Enhances the Value of Unimportant Tasks**

*“The Apollo missions were like a giant jigsaw puzzle where every piece, no matter how small or large, had its place. My role in the puzzle, although small, was a necessary activity.” – Harold Miller, NASA engineer*

Nearly every day—both at work and at home—people begrudgingly complete mundane tasks that feel unimportant, such as formatting documents and clearing out closets. The current paper explores yet-untested psychological factors that may affect and potentially enhance how people experience these necessary but uninspiring tasks. We propose that *superordinate framing*, or thinking about how one's focal task builds on other tasks to achieve a higher-level goal, is an effective way to imbue seemingly unimportant tasks with meaning. We propose that prompting people to think about the embedded context of unimportant tasks may lead people to experience these tasks as more enjoyable, meaningful, and motivating.

Why might this be the case? First, superordinate framing illuminates a connection between distinct tasks. People derive meaning and joy from recognizing connections between seemingly unrelated things. People find moments of generating creative solutions, which involve discovering unusual associations (Barron, 1969), highly enjoyable and meaningful (Csikszentmihalyi, 1997). Students experience greater joy and learn more effectively when they are taught using the “jigsaw technique”—in which they discuss how the unique subjects they covered in breakout groups fit together—as opposed to conventional classroom lectures (Aronson, 1978, 2002). By revealing how one's focal task connects with other tasks to achieve a greater purpose, superordinate framing may add the joy and meaning of discovering these associations to people's experience of the task.

Superordinate framing also highlights that a focal task belongs to a set of tasks that achieve the same purpose. Basic Gestalt principles suggest that people perceive sets as “richly symbolic...[and] imbued with meaning (Kohler, 1947).” Consistent with these principles,

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empirical evidence suggests that people place a high value on objects that belong to sets (Barasz, John, Keenan, & Norton, 2017; Evers, Inbar, & Zeelenberg, 2014; Hsee, 1998; Shaddy & Fishbach, 2017; Smith, Faro, & Burson, 2013). For example, consumers are willing to pay more for identical goods and services that are framed as a part of a bundle (Shaddy & Fishbach, 2017). While such research has demonstrated a positive effect of set-framing on people's *valuation* of products and tasks (e.g., choice), in the current research we explore the effect of set-framing on people's *experience* (e.g. enjoyment). This distinction is particularly relevant in the context of our investigation, work tasks, as it is a domain where valuation and experience do not necessarily coincide (i.e. people must engage in some work tasks despite not valuing them highly).

In the current research, we also directly compare superordinate framing with another well-known way to boost task meaning: purpose reflection. A large literature on construal level theory suggests that thinking about the bigger purpose of a task could be a powerful way to imbue a task with significance (Trope, 1986, 1989; Trope & Liberman, 2010, 2011). Consistent with this literature, people persist longer on challenging tasks when they think about why (vs. how) they are doing the task (See Fujita & Carnevale, 2012 for review). Yet, we propose that purpose reflection might not be equally effective for all tasks: when a focal task feels unimportant, it may be difficult to associate the task with a positive, impactful purpose. For example, a doctor formatting patient records might find it easier to think about the purpose of the task as "creating a perfect record" rather than "helping patients recover." In some cases, thinking about the broader purpose of an unimportant task could even backfire, as thinking about the purpose could prompt an individual to reflect on the purposelessness of the task (e.g. "I am doing this just to satisfy my bureaucratic manager, it doesn't save lives at all! If anything, it takes me *away* from saving lives!"). In contrast, superordinate framing may not risk this backfiring effect

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because it helps strengthen the perceived connection between the focal task and the purpose by highlighting their indirect association through the other related tasks. Thus, in the current paper, we test whether superordinate framing might enhance people's enjoyment of meaningless tasks *over and above* simply highlighting the task's broader purpose.

### Overview of Experiments

Four experiments tested the hypothesis that applying superordinate framing might enhance people's experience of seemingly unimportant tasks—both compared to no framing and compared to thinking about task purpose in isolation. In Experiment 1, we demonstrated the basic effect by comparing superordinate framing to thinking about the broader purpose of the task. In Experiment 2, we explored whether applying superordinate framing was effective in enhancing the value of important tasks. We predicted that the positive effect of superordinate framing would be attenuated for important tasks, as participants already find it highly enjoyable and meaningful. In Experiments 3-4, we examined whether superordinate framing was effective when applied in contexts where a third party communicate the task (vs. how an individual reflects on the task on their own), thus suggesting managerial implications for helping others enjoy superordinate benefits. Last, we also explored whether different kinds of superordinate frames elicit similar benefits: connecting a focal task with one's own future tasks to achieve a broader purpose (an intrapersonal superordinate frame) vs. connecting a focal task with others' tasks to achieve a broader purpose (an interpersonal superordinate frame).

We report all exclusions, measures, manipulations, and stopping rules for data collection (Simmons, Nelson, & Simonsohn, 2011). All data, materials, and preregistration documents are available at [https://osf.io/jazhb/?view\\_only=2297496668954804a1a5ccce5e3b2289](https://osf.io/jazhb/?view_only=2297496668954804a1a5ccce5e3b2289)).

### Experiment 1

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In Experiment 1, we tested whether applying superordinate framing to unimportant work tasks would increase how enjoyable, meaningful, and motivating people found these tasks, compared to thinking about the broader purpose of the task.

### Method

**Participants.** We aimed to recruit at least 230 working adults per condition. We requested 700 participants from Amazon's Mechanical Turk. On the opening screen, we asked participants what statement best described their current employment situation and the weekly hours they worked in their primary job. Only participants who reported being employed for pay at least 21 hours a week could proceed and complete the experiment. We excluded 22 additional participants (equally distributed across conditions,  $p = .528$ ) due to low response quality (e.g. copying-and-pasting irrelevant text in free-response questions), leaving a final sample of 678 participants (45.58% female;  $M_{\text{age}} = 37.32$  years,  $SD_{\text{age}} = 11.38$ )<sup>1</sup>, allowing us to detect a minimum effect of  $d = 0.27$  in a two-sample t-test with 80% power.

**Procedure.** Participants were randomly assigned to one of three conditions: *control*, *purpose*, and *superordinate*. Following the reappraisal intervention used by Ayduk & Kross, (2010), all participants first described one specific work task that they considered “unimportant” and “meaningless.” In addition to describing an unimportant task, participants who were assigned to the superordinate condition listed two other tasks that “you or other people at your job do that build on each other with the task that you described like puzzle pieces to achieve a broader purpose” and described the broader purpose that the three tasks achieve together<sup>2</sup>. Participants assigned to the purpose condition simply described the broader purpose of the

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<sup>1</sup> For this experiment and all experiments, results hold when including all participants (see our OSF repository).

<sup>2</sup> Full phrasings and all original materials are available at our OSF repository.

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unimportant task; control participants were given no further instructions. All participants then completed the following measures.

**Manipulation Check: Task Importance.** To ensure that all participants described an unimportant task, participants rated their task on a scale of 1 (*Unimportant compared to other tasks*) to 5 (*Crucial importance compared to other tasks*) (Adapted from Lindell, Clause, Brandt, & Landis (1998).

**Main DV: Task Rating.** Participants indicated their task enjoyment by rating the task on six dimensions (*enjoyable, pleasurable, engaging, fun, positive, exciting*) on a 1 (*not at all*) to 9 (*extremely*) scale ( $\alpha = 0.96$ ; Adapted from Smith et al., 2013). Using the same scale, they also rated how *meaningful* and *motivating* they found the task.

**Purpose Significance.** To better understand how participants ascribed purpose to unimportant tasks following each intervention, two coders rated how meaningful, impactful, and important each submitted purpose was compared to all the other purposes submitted in the experiment on a scale from -2 (*much less than average*) to +2 (*much more than average*). The raters also used a -2 (*much more negative than average*) to +2 (*much more positive than average*) scale to rate how positive or negative the purpose appeared. We created a composite measure of purpose significance by taking the mean of these four ratings ( $\alpha = 0.93$ ). The purpose “to get everyone on the same page” received a low significance rating, while “to encourage communication between individuals who would not otherwise be able to see a widespread problem alone” received a high significance rating.

**Job Rating.** To explore whether superordinate framing of an unimportant task positively impacted participants’ perceptions of their jobs overall, we asked individuals how engaging and

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satisfying they found their job to be on a scale from 1 (*not at all*) to 9 (*extremely*) (Wanous, Reichers, & Hudy, 1997).

**Covariates.** To ensure that any condition differences were not driven by cognitive engagement or difficulty, we asked participants how much they paid attention, thought deeply, put in a lot of effort, and felt personally involved completing the writing task, each rated from 1 (*not at all*) to 7 (*extremely*; Wheeler, Petty, & Bizer, 2005). Participants also reported how difficult it was to engage in the task on a scale from 1 (*extremely easy*) to 7 (*extremely difficult*).<sup>3</sup>

### Results and Discussion

**Manipulation Check: Task Importance.** On average, comparing participants' response to the mid-point of the scale ("Moderately important compared to other tasks"), most participants described an unimportant task ( $M = 2.12$ ,  $SD = 1.09$ ),  $t(677) = -21.16$ ,  $p < .001$ ,  $d = -1.15$ .

**Main Effect: Task Rating.** A one-way analysis of variance (ANOVA) revealed a significant main effect of condition on task enjoyment,  $F(2, 675) = 15.96$ ,  $p < .001$ ,  $\eta^2 = .045$ . As predicted, superordinate framing boosted task enjoyment ( $M = 4.81$ ,  $SD = 2.24$ ) compared to the no reflection ( $M = 4.09$ ,  $SD = 2.53$ ),  $t(441) = -3.15$ ,  $p = .003$ ,  $d = 0.30$ , and purpose reflection conditions ( $M = 3.56$ ,  $SD = 2.19$ ),  $t(443) = 5.92$ ,  $p < .001$ ,  $d = 0.56$ . The meaning and motivation ratings yielded similar results (see Table 1). Purpose reflection backfired, resulting in diminished task enjoyment,  $t(466) = 2.44$ ,  $p = .013$ ,  $d = 0.20$  and motivation ( $M_{Purpose} = 3.60$ ,  $SD_{Purpose} = 2.43$ ;  $M_{Control} = 4.20$ ,  $SD_{Control} = 2.80$ ),  $t(466) = 2.46$ ,  $p = .012$ ,  $d = 0.23$ , compared to control.

Overall, applying superordinate framing enhanced people's experience of unimportant tasks, while thinking about the bigger purpose backfired.

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<sup>3</sup> See supplementary materials for correlation matrices of key variables for all experiments.

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**Purpose Significance.** Using hierarchical linear modeling (HLM), we estimated the effect of our experimental conditions while controlling for the random intercept of the raters (Moneta, Amabile, Schatzel, & Kramer, 2010). As predicted, participants who were asked to apply superordinate framing to their mundane tasks were rated as providing more significant purposes to the task ( $M = 0.73$ ,  $SE = 0.16^4$ ) compared to those who did not ( $M = 0.11$ ,  $SE = 0.16$ ),  $b = 0.62$ ,  $SE = 0.06$ , 95% CI [0.50, 0.74],  $p < .001$ . A bootstrapped mediation analysis (Hayes, 2013; Revelle, 2017) revealed that greater purpose significance partially mediated the positive effect of superordinate framing on enjoyment (IDE 95% CI [0.11, 0.56]), meaning (IDE 95% CI [0.14, 0.66]), and motivation (IDE 95% CI [0.07, 0.57]).

**Job Rating.** We found no differences on overall ratings of job engagement,  $F(2, 675) = 0.120$ ,  $p = .887$ ,  $\eta^2 = .000$  or satisfaction,  $F(2, 675) = 0.01$ ,  $p = .999$ ,  $\eta^2 = .000$ .

**Covariates.** The conditions also showed some differences in cognitive evaluation; however, all key results held when controlling for these differences (see Table 1).

## Experiment 2

In Experiment 2, we aimed to replicate the findings of Experiment 1 and to examine whether superordinate framing was also effective for important (vs. unimportant) tasks.

### Method

**Participants.** As in Experiment 1, we targeted 200 working adults per condition. We requested 1,200 respondents and successfully recruited 1,209 working adults through MTurk. Fifty participants (equally distributed across conditions,  $p = .646$ ) were excluded from the final analysis due to low response quality (e.g. copying-and-pasting irrelevant text in free-response

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<sup>4</sup> HLM results report estimated marginal means and standard errors.

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questions), leaving a final sample of 1,159 adults (50.99% female;  $M_{\text{age}} = 36.91$  years,  $SD_{\text{age}} = 11.18$ ), allowing us to detect an effect of  $d = 0.32$  in a two-sample t-test with 80% power.

**Procedure.** Experiment 2 followed a 2 (Task Importance: Unimportant vs. Important) X 3 (Framing: Control vs. Purpose vs. Superordinate) between-subjects design. First, all participants listed an unimportant and an important everyday work task (order counterbalanced).<sup>5</sup> Next, participants were assigned to focus on the unimportant or the important task and to complete the experimental intervention from Experiment 1. As in Experiment 1, participants assigned to the superordinate condition described two other tasks related to their important or unimportant focal task and elaborated on the broader purpose these three tasks achieve together. Participants assigned to the purpose condition reflected on the bigger task purpose in isolation. Control participants advanced directly to the key dependent variables.

In Experiment 1, superordinate framing did not increase job engagement or satisfaction; however, we speculated that it could impact job meaningfulness. Thus, we also asked: “How meaningful is your job? (1 = *not at all*; 9 = *extremely*).”

## Results and Discussion

**Main Effect: Task Rating.** A two-way ANOVA revealed a significant effect of condition,  $F(2, 1153) = 12.2, p < .001, \eta^2 = .016$ . Posthoc pairwise comparisons revealed that, consistent with Experiment 1, superordinate framing boosted task enjoyment ( $M = 5.52, SD = 2.19$ ) compared to no reflection ( $M = 4.76, SD = 2.52$ ),  $t(747) = 4.37, p < .001, d = 0.32$  and purpose reflection ( $M = 5.13, SD = 2.37$ ),  $t(737) = 2.24, p = .049, d = 0.17$ . In this experiment,

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<sup>5</sup> Listing important tasks and unimportant tasks on the same page did not impact participants’ perceptions of unimportant tasks: In Experiment 2, participants in the unimportant/control condition ( $M = 1.86, SD = 0.94$ ) rated their task as equally unimportant as control participants did in Experiment 1 ( $M = 2.00, SD = 1.11$ ),  $t(436.17) = 1.35, p = .178, d = 0.13$ .

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purpose reflection also boosted task enjoyment relative to no reflection,  $t(828) = 2.17, p = .049, d = 0.15$ .

The effect of the reflection manipulation on task enjoyment was moderated by task importance,  $F(2, 1153) = 15.23, p < .001, \eta^2 = .020$ . Posthoc pairwise comparisons revealed that, as predicted, superordinate framing boosted task enjoyment for unimportant tasks ( $M = 4.93, SD = 2.38$ ) compared to no reflection ( $M = 3.30, SD = 2.17$ ),  $t(363) = 6.82, p < .001, d = 0.72$ , and purpose reflection ( $M = 4.05, SD = 2.23$ ),  $t(357) = 3.60, p < .001, d = 0.38$ . However, when applied to important tasks, superordinate framing did not boost task enjoyment compared to control,  $t(382) = 0.42, p = 1.00, d = -0.04$ , or purpose reflection,  $t(378) = 0.36, p = 1.00, d = -0.04$ . Meaning and motivation ratings yielded similar results (see Table 2). Superordinate framing was most effective for unimportant tasks.

**Purpose Significance.** We created a composite measure of purpose significance based on three coders' ratings ( $\alpha = 0.75$ ). Controlling for rater bias using random intercepts revealed a significant interaction,  $b = 0.12, SE = 0.05, 95\% \text{ CI } [0.01, 0.22], p = .028$ . Simple effects analysis revealed that superordinate framing enhanced purpose significance for unimportant tasks,  $b = 0.12, SE = 0.05, 95\% \text{ CI } [0.03, 0.21], p = .011$ , but not for important tasks,  $b = -0.02, SE = 0.04, 95\% \text{ CI } [-0.10, 0.06], p = .672$ . That is, superordinate framing was more effective in enhancing purpose significance when applied to unimportant tasks rather than important tasks.

**Job Rating.** Once again, there was no effect of task framing,  $F(2, 1153) = 0.06, p = .940, \eta^2 = .000$  or an interaction,  $F(2, 1153) = 0.38, p = .684, \eta^2 = .000$  on job meaning. We found similar results for task job engagement and satisfaction (see Table 2). These results suggest that superordinate framing did not impact individuals' evaluation of their overall job.

## Experiment 3

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In Experiment 3, we explored whether the benefits of superordinate framing extend across different kinds of superordinate frames. Some participants in Experiments 1-2 described how their own tasks collectively achieve a greater purpose without requiring other people (e.g., one participant explained that “taking notes about a call” combined with “communicating understanding of these notes” to achieve “clear communication with a client”), while other participants invoked more social connection (e.g., one participant described how “filing paperwork” combined with “contacting customers” and “working with colleagues to sell cars” kept their dealership open). It is possible that our previous effects were driven by participants who invoked social connection, as prior research suggests that when people acknowledge their work as an opportunity to connect with others, they find tasks more meaningful, enjoyable, and motivating (e.g. Carr & Walton, 2014). Even the mere feeling of working together while performing a task in isolation can boost enjoyment (Butler & Walton, 2013). Thus, superordinate frames may be most powerful when they involve connecting the individual working on the task with *others*.

In Experiment 3, we tested this possibility by manipulating whether the superordinate context was social—the immediate task output would be combined with the task output of others—or not. We hypothesized that superordinate framing would be more effective when the superordinate context was social (vs. non-social). Because we applied superordinate framing in how we described the context during task assignment, the experiment also allowed us to explore whether superordinate is effective even when applied in how other people (e.g. their managers) communicate the tasks. The experiment was preregistered (<http://aspredicted.org/blind.php?x=77fu7d>).

## Method

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**Participants.** We targeted 200 participants per condition, requested 800, and successfully recruited 839 online workers on MTurk (47.73% female;  $M_{\text{age}} = 33.29$  years,  $SD_{\text{age}} = 9.70$ ), allowing us to detect an effect of  $d = 0.28$  in a two-sample t-test with 80% power.

**Procedure.** Experiment 3 followed a 2 (context: non-social vs. social) X 2 (framing: purpose vs. superordinate) between-subjects design. All participants were assigned to work on an unimportant, menial task—creating virtual blocks by answering multiple choice questions (See supplementary materials)—to achieve the broader purpose of creating a work of art, which we chose based on pretest because many MTurkers perceived it to be meaningful and positive.

Participants were assigned to one of four conditions: *non-social-purpose*, *non-social-superordinate*, *social-purpose*, and *social-superordinate*. Along with the task instructions, participants in the non-social conditions were told that they were taking part in an “*independent art project*,” while those in the social conditions were told their task was a part of a “*crowdsourcing art project*”<sup>6</sup>. Participants assigned to the superordinate conditions were told that any blocks they make would be combined with other blocks to create a work of art, while purpose participants were simply told they would create a work of art (see Table 3).

After creating each block, participants were reminded how many blocks they have created so far and were asked whether they would like to create another block or end the task. This provided us with an objective measure of work motivation. This process continued until participants opted out, and then reported their work experience on the dependent measures.

Participants answered the same task enjoyment, meaning and motivation measures from Experiments 1-2 and an exploratory 1-item measure of intrinsic motivation: “Overall, how

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<sup>6</sup> In a series of pilot studies, we found that participants who completed their task with the social prompt were more likely to have other participants on their minds.

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motivated were you while working on the block-making task? (1 = *not at all*; 9 = *extremely*)” (Ryan & Deci, 2000).

### Results and Discussion

Replicating Experiments 1-2, participants who were assigned to the superordinate condition found the block task more enjoyable ( $M = 5.96$ ,  $SD = 2.00$ ) than purpose participants ( $M = 5.50$ ,  $SD = 2.08$ ),  $F(1, 835) = 11.25$ ,  $p < .001$ ,  $\eta^2 = .013$ . There was no significant difference in the number of blocks created across superordinate ( $M = 2.00$ ,  $SD = 1.30$ ) and purpose ( $M = 1.95$ ,  $SD = 1.23$ ) conditions,  $b = 0.05$ ,  $SE = 0.07$ , 95% CI [-0.09, 0.18],  $p = .483$ .

In contrast to our predictions, there was no significant main effect of whether the task context was social,  $F(1, 835) = 0.08$ ,  $p = .784$ ,  $\eta^2 = .000$ , or a significant interaction,  $F(1, 835) = 0.06$ ,  $p = .802$ ,  $\eta^2 = .000$ , on task enjoyment. We found similar results for the meaning, motivation, and interest ratings (see Figure 2). Thus, superordinate framing was more effective in boosting task enjoyment, meaning, and motivation than purpose reflection, regardless of the kind of superordinate frame, and even when applied during task assignment by a third-party (vs. participants themselves).

### Experiment 4

In Experiment 4, we aimed to replicate Experiment 3 using a different task. We also added a measure of reservation wages to explore whether superordinate framing led people to demand greater compensation as a result of finding the task more enjoyable, meaningful, and motivating. The experiment was preregistered (<http://aspredicted.org/blind.php?x=j7z6bk>).

### Method

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**Participants.** We targeted 200 participants per condition, requested 800, and recruited 801 participants (44.19% female;  $M_{\text{age}} = 35.65$  years,  $SD_{\text{age}} = 11.24$ ) from MTurk. Our sample size could detect an effect of  $d = 0.28$  with 80% power in a two-sample t-test.

**Procedure.** Experiment 4 followed the design of Experiment 3, with two key differences. First, we used a different task. All participants were assigned to work on a different unimportant, menial task—designing waiting rooms by selecting three items in the room: chair, table, and accessory—to achieve a broader goal of designing a house (See supplementary materials).

We also asked participants' reservation wages by asking "What is the lowest amount of payment you would accept for designing 10 rooms?" (adapted from Jones, 1989). We had two competing hypotheses: First, self-determination theory (Ryan & Deci, 2000) suggests that when people find a task to be more intrinsically motivating, they demand less compensation. Thus, superordinate participants, who find the task more enjoyable, meaningful, and motivating, may demand a lower wage (Ariely, Kamenica, & Prelec, 2008; Fishbach & Choi, 2012). Second, people's demand for compensation may reflect how much they value their labor (Jones, 1989; Plott & Zeiler, 2005). Thus, superordinate participants, who value their tasks more highly, may demand a higher wage.

## Results and Discussion

**Perception of Task.** Replicating Experiment 3, superordinate framing significantly boosted participants' enjoyment of the room designing task ( $M = 6.14$ ,  $SD = 2.09$ ) compared to purpose reflection ( $M = 5.64$ ,  $SD = 1.93$ ),  $F(1, 797) = 12.54$ ,  $p < .001$ ,  $\eta^2 = .016$ . There was no significant main effect of social context,  $F(1, 797) = 0.26$ ,  $p = .612$ ,  $\eta^2 = .000$ , and no significant interaction,  $F(1, 797) = 0.23$ ,  $p = .635$ ,  $\eta^2 = .000$ . We found similar results for ratings of meaning, motivation, and interest (see supplementary materials).

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**Reservation Wage.** Our reservation wage data had an unusual amount of variance ( $M = 6.82$ ,  $SD = 67.00$ ). The wide variance was driven a number of outliers (e.g. 16 participants demanded \$50 or higher to design 10 more rooms, which would be a five-minute task). We excluded 84 outlier observations that lied outside the *1.5 X Inter Quartile Range* ( $M = 54.70$ ,  $Median = 5$ ,  $SD = 201.67$ ; equally distributed across conditions,  $\chi^2(1, N = 801) = 0.91$ ,  $p = .340$ ). Excluding these participants left us with 717 responses ( $M = 1.21$ ,  $Median = 1$ ,  $SD = 0.66$ ).<sup>7</sup> A two-way ANOVA revealed that superordinate participants demanded significantly more monetary compensation for the same amount of work ( $M = 1.33$ ,  $SD = 0.70$ ) than the purpose participants ( $M = 1.10$ ,  $SD = 0.60$ ),  $F(1, 713) = 21.35$ ,  $p < .001$ ,  $\eta^2 = .029$ . There was no difference in the amount of wage demanded by participants when the task context was social ( $M = 1.19$ ,  $SD = 0.70$ ) vs. non-social ( $M = 1.24$ ,  $SD = 0.62$ ),  $F(1, 713) = 0.70$ ,  $p = .404$ ,  $\eta^2 = .001$ . The interaction was also non-significant,  $F(1, 713) = 0.29$ ,  $p = .590$ ,  $\eta^2 = .000$ . These results suggest that superordinate framing, but not social nature of the task, led participants to value the effort they put in the task more highly.

### General Discussion

From taking clothes to the dry cleaners to printing handouts, our lives are full of tasks that feel unimportant but need to get done. Through four experiments, we illuminate how individuals experience and find meaning in seemingly unimportant tasks. People who thought about how an unimportant task combined with other tasks to achieve a broader purpose found the tasks more enjoyable, meaningful, and motivating, more so than those who reflected on the broader purpose of the task (Experiments 1-2). Superordinate framing also enhanced task experiences when a third party communicated the task using superordinate framing (Experiments

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<sup>7</sup> We did not anticipate this high rate of outliers and thus did not preregister this analysis.

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3-4). As a result, superordinate framing led people to demand greater compensation for their work (Experiment 4). These findings provide evidence that superordinate framing is a helpful managerial tool when assigning mundane tasks. Applying superordinate framing also led people to demand higher compensation. Thus, applying superordinate framing may be an investment from a managerial perspective, requiring greater compensation upfront but resulting in employees enjoying and therefore feeling more committed to their work over time.

We also tested two potential moderators of the benefits of superordinate framing: task importance and the social nature of the broader context of task completion. Superordinate framing was most effective when applied to tasks that people saw as unimportant (Experiment 2). We found no evidence that superordinate framing was more effective when it described how the individual's own tasks fit together over time (i.e., how my work now will combine with my future work) or how their own tasks fit with others' tasks (i.e., how my work will combine with others') (Experiments 3-4). Thus, task embeddedness seems to have a uniquely positive effect on task experience, regardless of whether it involves a social component or not.

Together, these findings make at least three contributions to current understandings of task motivation. First, we extend the literature on construal level theory (Trope & Liberman, 2011) by identifying a boundary condition in which reflecting on task purpose is less effective in enhancing task meaning: when the task is unimportant. Reflecting on the purpose of one's unimportant task did not improve task enjoyment, meaning, and motivation as much as superordinate framing. In Experiment 1, thinking about the task purpose resulted in diminished task meaning. We speculate that this may be driven by people finding it difficult to associate their unimportant tasks with an important purpose. However, applying superordinate framing may help people overcome this dissonance by highlighting the joint association the unimportant

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task shares with the important purpose through other tasks. Future research will benefit from further identifying when and why reflecting on the purpose of unimportant tasks backfires.

Second, we examine Gestalt psychology in a previously unexplored domain: task experience. We find that highlighting that an unimportant task belongs to a set of tasks that jointly achieve a purpose can effectively strengthen the association between the meaningless task and its purpose. Finally, we provide a more nuanced understanding of why people find collaborative projects more enjoyable. In Experiments 3-4, while cues of working towards a collaborative goal increased task enjoyment and meaning, cues of working together in itself did not. Thus, people may find collaborative tasks engaging not only because they provide an opportunity to interact with others (Butler & Walton, 2013), but also because these tasks help people see that their tasks are connected with other tasks.

Future research would benefit from exploring how superordinate framing impacts people's experiences when applied to tasks with aversive purposes. Most of the experiences in our experiments were mildly positive. This was true regardless of whether these experiences were described by participants (e.g. "I check my voicemail and emails, and create a to-do list. This helps me work more efficiently during the day.") or assigned by researchers (e.g. creating an artwork). But it is an open question what would happen if superordinate framing was applied to a set of tasks with a negative overall purpose. For example, what would happen in the case of a corporate lawyer who perceived the bigger purpose of their task as protecting firms who take advantage of consumers? Our experiments suggest that superordinate framing would create a stronger association between the task and the bigger purpose. Thus, we speculate that when the individual has a negative attitude towards the supposed purpose of the tasks, applying superordinate framing may lead to worse task experiences.

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Future research should also explore why there was no difference between the social and non-social frames in our data (Experiments 3-4). Our sample was limited to MTurkers located in the U.S., who may be largely individualistic or who may not feel a sense of community with MTurkers. Thus, the prospect of collaborating with other MTurk participants may not have been particularly meaningful for these participants. In one's daily life, a superordinate frame that highlights the potential to collaborate with one's coworkers or friends (whom they have a meaningful prior relationship with) may be more effective in fulfilling one's need to belong (Baumeister & Leary, 1995), translating into greater task value. Superordinate framing may also be particularly effective in collaborative contexts (Leary, Kelly, Cottrell, & Schreindorfer, 2013) or those from interdependent cultures, who may place greater value the social, collaborative opportunities (Kitayama & Markus, 1995). Alternatively, for individuals with a stronger need for uniqueness or from independent cultures, applying superordinate framing for collaborative contexts may lead to a decrease in motivation.

In sum, the current paper documents initial evidence that superordinate framing—thinking about how one's task combines with other tasks to achieve a broader purpose—might be a powerful (and costless) psychological strategy for boosting one's experience of work. Helping people connect the dots in their everyday routines, from the workplace to the living room, may boost the perceived value of tasks that otherwise seem insignificant (yet still need to get done).

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## TABLES

Table 1: Sample size, means and standard deviations across conditions (Experiment 1)

Measure	Superordinate	Control	Statistics	Purpose	Statistics	Statistics
	N=210	N=233	(Control vs. Superordinate)	N=235	(Purpose vs. Superordinate)	(Control vs. Purpose)
			<i>d</i>		<i>d</i>	
Task Enjoyment ( $\zeta = 0.96$ )	4.81 (2.24)	4.09 (2.53)	0.30**	3.56 (2.19)	0.56***	-0.23*
Task Meaning	5.79 (2.43)	4.67 (2.70)	0.43**	4.72 (2.51)	0.43***	0.02
Task Motivation	5.08 (2.47)	4.20 (2.80)	0.33***	3.60 (2.43)	0.60***	0.23*
Purpose Significance	0.73 (0.16)	-	-	0.11 (0.16)	$\beta = 0.68***$	-
Job Engagement	6.90 (2.07)	6.82 (1.94)	0.04	6.82 (2.04)	0.04	0.003
Job Satisfaction	6.60 (2.07)	6.61 (2.03)	0.00	6.61 (2.03)	0.004	0.004
Task Importance	2.27 (1.16)	2.00 (1.11)	0.24*	2.09 (0.99)	0.15	0.09
Cognitive Elaboration ( $\zeta = 0.90$ )	5.83 (1.04)	5.40 (1.44)	0.21*	5.59 (1.25)	0.34***	0.14
Manipulation Difficulty	3.44 (1.67)	2.73 (1.68)	0.43***	2.77 (1.60)	0.41***	0.03
(Controlling for covariates)			<i>b (SE)</i>		<i>b (SE)</i>	
Task Enjoyment	4.66 (0.16)	4.18 (0.15)	0.48* (0.22)	3.59 (0.15)	1.07*** (0.22)	-0.59** (0.21)
Task Meaning	5.56 (0.22)	4.50 (0.21)	0.84*** (0.24)	4.56 (0.21)	0.86*** (0.24)	-0.02 (0.23)

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Task Motivation	4.90 (0.18)	4.30 (0.17)	0.60* (0.25)	3.63 (0.17)	1.27*** (0.25)	-0.67** (0.23)
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\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*Table 2: Sample size, means and standard deviations across conditions (Experiment 2)*

Measure	Superordinate N=159	Control N=206	Statistics (Control vs. Superordinate)	Purpose N=200	Statistics (Purpose vs. Superordinate)	Statistics (Control vs. Purpose)
<b>UNIMPORTANT TASK</b>						
			<i>d</i>		<i>d</i>	<i>d</i>
Task Enjoyment ( $\zeta = 0.96$ )	4.93 (2.38)	3.30 (2.17)	0.72***	4.05 (2.23)	0.38***	0.34**
Task Meaning	5.81 (2.70)	3.82 (2.50)	0.77***	5.05 (2.38)	0.30**	0.50***
Task Motivation	5.09 (2.62)	3.19 (2.40)	0.76***	4.31 (2.45)	0.31**	0.46***
Purpose Significance	0.31 (0.03)	-	-	0.20 (0.03)	$\beta = 0.27^*$	-
Job Meaning	6.89 (2.05)	6.81 (2.08)	-0.04	6.71 (2.08)	-0.09	-0.05
Job Engagement	7.12 (1.92)	7.17 (1.67)	0.04	7.08 (1.93)	0.08	-0.05
Job Satisfaction	6.75 (2.07)	6.81 (1.86)	0.03	6.81 (1.86)	0.01	0.04
Measure	Superordinate N=170	Control N=214	Statistics (Control vs. Superordinate)	Purpose N=210	Statistics (Purpose vs. Superordinate)	Statistics (Control vs. Purpose)
<b>IMPORTANT TASK</b>						
			<i>d</i>		<i>d</i>	<i>d</i>
Task Enjoyment	6.08	6.16	0.04	6.15	0.04	0.005

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	( $\ll = 0.96$ )	(1.83)	(1.98)		(2.17)		
Task Meaning		7.24 (1.96)	7.39 (1.96)	0.13	7.40 (1.99)	0.14	0.006
Task Motivation		6.45 (2.11)	6.52 (2.34)	0.10	6.67 (2.18)	0.03	0.07
Purpose Significance		0.43 (0.03)	-	-	0.43 (0.03)	$\beta = -0.04$	
Job Meaning		7.00 (2.15)	7.00 (2.05)	0.002	7.08 (2.14)	0.04	0.03
Job Engagement		7.27 (1.92)	7.15 (1.92)	-0.06	7.34 (1.83)	0.04	0.10
Job Satisfaction		7.08 (1.95)	6.82 (1.97)	-0.13	6.92 (2.05)	-0.08	0.05

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 3: Manipulation Text (Experiment 3)**

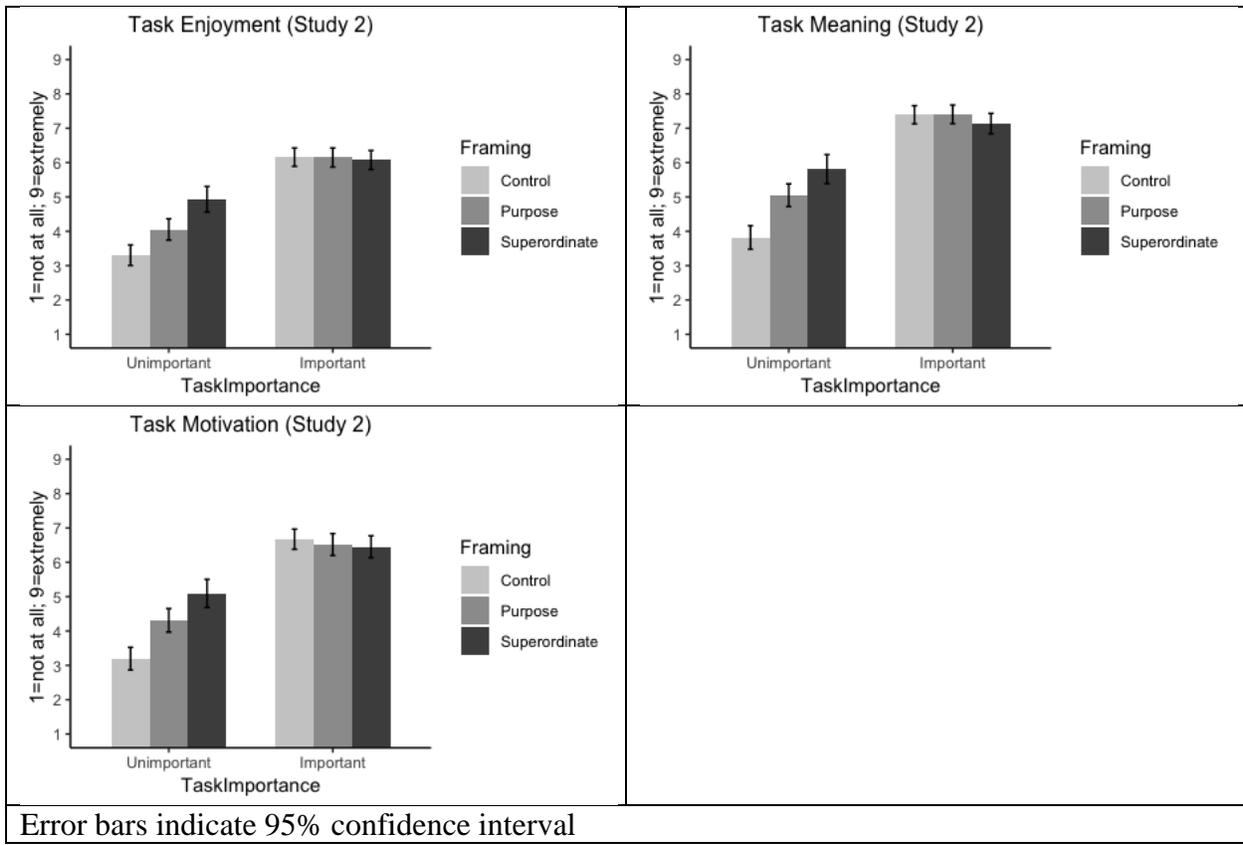
	<b>Purpose</b>	<b>Superordinate</b>
<b>Non-social</b>	In today's experiment, you will virtually puncture photos as an <b>independent</b> art project. (...) Again, we are recruiting you to do this for an <b>independent</b> art project. You will be working alone on this art project	In today's experiment, you will virtually puncture photos as an <b>independent</b> art project. (...) Again, we are recruiting you to do this for an <b>independent</b> art project. You will be working alone on this multipart art project. You will also be working on other parts to design other custom blocks. Your blocks made in Part 1 will be weaved together with the blocks made in other parts to create a larger work of art. <b>Your work is one small part of something bigger!</b>

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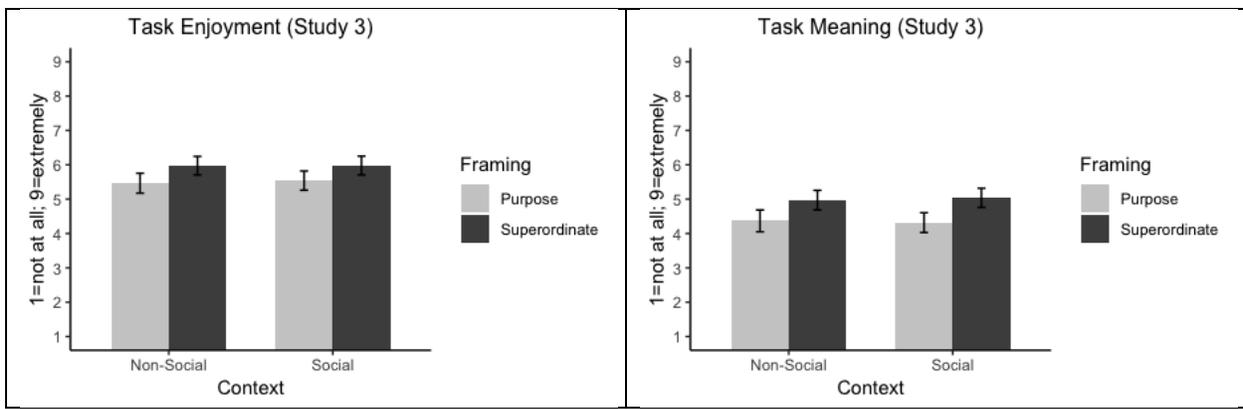
<p><b>Social</b></p>	<p>In today's experiment, you will virtually puncture photos as a <b>crowdsourcing</b> art project.</p> <p>(...)</p> <p>Again, we are recruiting you to do this for a <b>crowdsourcing</b> art project. Many other Turkers are <b>sharing this experience</b> with you: they are completing this HIT right at this moment, just like you. However, your work is entirely <b>independent</b>.</p>	<p>In today's experiment, you will virtually puncture photos as a <b>crowdsourcing</b> art project.</p> <p>(...)</p> <p>Again, we are recruiting you to do this for a <b>crowdsourcing</b> art project. Many other Turkers are <b>sharing this experience</b> with you: they are completing this HIT right at this moment, just like you. Your blocks will be <b>weaved together</b> with the blocks of others to create a larger work of art. <b>Your work is one small part of something bigger!</b></p>
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FIGURES

**Figure 1: Superordinate Framing was effective when applied to unimportant tasks (Experiment 2)**



**Figure 2: Superordinate Framing was equally effective across social and non-social tasks (Experiment 3)**



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