How Incentives Help Us Do Hard Things First

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How Incentives Help Us Do Hard Things First
by
Patrick Matthew Healey

A dissertation presented to
Washington University in St. Louis
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of Doctor of Philosophy in Business Administration

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ABSTRACT OF THE DISSERTATION

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by

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Professor Robyn A. LeBoeuf, Chair

When facing tasks of differing difficulty, do people choose to tackle harder ones first or easier ones first? I show that the answer depends on how motivated they are to complete all of the tasks. I examine situations in which people must complete both a harder task and an easier one by the same deadline. When I incentivize people for completing both tasks by that deadline, they are more apt to complete the harder task before the easier task, compared to when they are not incentivized. This change results from two factors. First, the incentive leads people to care more about completing the tasks in an order that leads to success. Second, people believe that the difficult-first order is more likely to lead to success than is the easy-first order. Thus, when people are incentivized, they find successful task completion to be more important, and they switch to the difficult-first order, which they think is more likely to lead to success. I discuss implications of these findings both for individuals, who may be interested in more efficiently tackling difficult challenges, and also for managers and firms, who may be interested in influencing which tasks their employees and customers undertake first.
Introduction

Whether managing projects at work, planning an event, or making a purchase, people often must balance multiple decisions and tasks, some easy and some more difficult. For example, employees may face a combination of easy tasks and more complex ones, all due by the same deadline, and they may need to decide which to tackle first. Consumers also face tasks that may be easier and harder: for example, when switching to a new provider for home internet and mobile phone service, people may find changing their internet service to be difficult, requiring many steps and a visit from a technician, but switching their phone service to be easy, requiring just a few clicks. If both the hard tasks and the easy tasks need to be done by a given deadline (e.g., before the end of the week or before their current phone and internet service ends), which task do people begin with—and what, if anything, can influence which task they start with?

Understanding, and even influencing, the order in which people tackle such tasks can be important. Some prior research suggests that people often start with easy tasks (Habbert and Schroeder 2020; Rusou, Amar, and Ayal 2020), but also that starting with easy tasks can be suboptimal (KC et al. 2020; Rusou, Amar, and Ayal 2020). After all, if people start with easy tasks and procrastinate on difficult ones for too long, they may run out of time to complete the difficult ones or may find their options limited, making difficult tasks even harder. Given that simple interventions can facilitate the uptake and completion of tasks and goals it may be worthwhile for firms and individuals alike to identify interventions that can make people more likely to begin with more difficult tasks—and thus potentially to fulfill more of their goals.
In this paper, I investigate situations in which people need to complete easier and harder tasks by a deadline. I find that people are more likely to begin with harder tasks when they are promised an incentive for completing all of the tasks by that deadline, compared to when no such incentive is offered. That is, rather than showing that incentives prompt people to work longer or more accurately (Ashton 1990; Bénabou and Tirole 2003; Remus, O’Connor, and Griggs 1998), I show that incentives for timely task completion can change the order in which people approach pending tasks. I show that this effect arises for two reasons. First, I show that successful task completion seems more important to people who are incentivized, compared to those who are not. Second, I show that, although people generally perceive beginning with an easier task to be more enjoyable, they simultaneously have a lay theory that beginning with the more difficult task is more likely to lead to the successful completion of both tasks. Thus, incentives heighten the importance of success, leading people to focus less on what they would enjoy and to rely more on their beliefs about what leads to success.

In what follows, I first review prior literature on how people navigate the choice between beginning with harder tasks or easier ones. Then, I discuss how this choice may represent a perceived conflict between having an enjoyable experience and having a greater chance at success. I consider how incentives may affect how people resolve such conflicts. From there, I develop my hypotheses about how incentives may affect the order in which people choose to tackle hard and easy tasks¹.

¹ Parts of this dissertation were co-authored by the candidate and the candidate’s chair. The candidate served as lead author on this co-authored work.
Chapter 1: Conceptual Background

1.1 Facing Difficult and Easy Tasks

Much literature has examined how people approach goals and form subgoals (Amir and Ariely 2008; Fishbach, Dhar, and Zhang 2006). I specifically draw from papers that have considered cases where completing an overarching goal requires completing both harder tasks and easier ones and where people must choose which task to start with (Habbert and Schroeder 2020; Jin, Xu, and Zhang 2015; KC et al. 2020; Rusou, Amar, and Ayal 2020; Vonderhaar, McBride, and Rosenbaum 2019). Several of these papers have found that people prefer to start with easier tasks instead of harder ones. For example, Habbert and Schroeder (2020) asked people to consider a set of tasks required for a job application and found that 81% of participants preferred to complete the tasks in an easy-to-hard order instead of a hard-to-easy order. As another example, Rusou, Amar, and Ayal (2020) had people play a game where they could do smaller, less effortful tasks that earned fewer points, and larger, more effortful tasks that earned more points. The goal was to maximize earned points overall, but when given a choice of which task to start with, participants tended to start with, and stick with, the easier tasks, leading them to earn fewer points than if they had started with the harder tasks. Rusou, Amar, and Ayal (2020) call this pattern of starting with easier tasks even when doing so is less efficient the “smaller tasks trap.”

Research has suggested several reasons for why people prefer to start with easier tasks. People may feel that easy tasks can be completed quickly, and so starting with an easy task may promise a sense of progress towards the larger goal of completing all tasks (Amar et al. 2011; Rusou, Amar, and Ayal 2020). Furthermore, difficult tasks may seem more aversive, even just because they are difficult, and so people may prefer to postpone them when they are allowed to (Habbert and Schroeder 2020). People may even apply the easy-to-hard approach because it mimics the
natural process of learning, where one attempts easier things before harder ones; people may do this even when learning is not applicable and easier tasks cannot help with harder ones (Habbert and Schroeder 2020).

All that said, research does not always find that people prefer to start with easier tasks, with some papers finding that people prefer to start with harder tasks (Jin, Xu, and Zhang 2015; Fournier et al. 2018; VonderHaar, McBride, and Rosenbaum 2019). In such cases, it has been suggested that people prefer a hard-to-easy order because they feel like they should tackle the harder tasks while their energy levels are higher (Jin et al. 2015), or because they want to reduce the cognitive load that may come from contemplating a difficult task (Fournier et al. 2018; VonderHaar, McBride, and Rosenbaum 2019). There are likely many factors that determine whether, on balance, people prefer to start with easier or harder tasks. This paper aims not to identify whether there is an overall, inherent preference for starting with one task or the other, but rather to understand what may influence people’s preferred task ordering.

1.2 Enjoyment vs. Success
I propose that situations where people must choose between starting with an easier task versus a harder one reflect a conflict between the order people think they will enjoy most and the order they think will be most apt to lead to success. Starting with easy tasks may lead to quick, immediate progress with minimal immediate effort, which people may find relatively rewarding. To the extent that people focus somewhat myopically on the first task that they will do, the easy-first order may therefore generally seem more appealing because of its promise of fast progress. (Habbert and Schroeder 2020; KC et al. 2020; Rusou, Amar, and Ayal 2020). Starting with hard tasks, on the other hand, may entail needing to do more work, and potentially more aversive
work, right away. For these reasons, an easy-hard route may generally seem like a more attractive and enjoyable prospect than a hard-easy route.

Although people may tend to believe that the easy-first order will be more enjoyable, I suggest that people may also hold a lay theory or belief that starting with more difficult tasks may yield a greater likelihood of success overall. Where might such a belief come from? First, people may have had experience spending too much time on trivial, easy tasks and not getting to more important, difficult tasks, leading them to fail to complete the harder tasks. Furthermore, people may have internalized common advice to get big challenges out of the way first, such as the popular quote, “If it’s your job to eat a frog, it’s best to do it first thing in the morning” (see Habbert and Schroeder 2020 for a discussion of such advice). Indeed, research supports the idea that starting with harder tasks may lead to better objective outcomes (KC et al. 2020; Rusou, Amar, and Ayal 2020) and that people believe that starting with harder tasks can be beneficial (Jin et al. 2015). Thus, despite believing that the easy-hard path may be more enjoyable, people may have a belief or lay theory that the hard-easy path may be more likely to lead to success.2

1.3 The Role of Incentives
If people face a decision of which task to begin with and feel a conflict between an order promoting enjoyment and one promoting success, then what can influence how they resolve that conflict? I suggest that one important factor may be how motivated they are to complete the overarching goal (that is, to complete all tasks). If they are not particularly motivated to complete the tasks, they may be content to let the pursuit of enjoyment govern the decision and may be relatively likely to start with an easier task. However, if they feel highly motivated to complete

2 I note two things. First, I do not argue that starting with the harder option is truly optimal; rather, I suggest that people often hold a belief that it is. Second, although I predict that people hold this belief, there are times when they likely do not, such as when the easier task may help people learn to complete the harder one. Study 5 examines this idea.
the tasks, and if they have a lay theory that starting with harder tasks is more likely to lead to success, they may follow the prescription of their lay theory and start with a harder task.

I focus on the role that incentives can play to heighten motivation and shape people’s decisions about which task to begin with. Much research has shown incentives’ ability to increase motivation (Bénabou and Tirole 2003; Gneezy, Meier and Rey-Biel 2011; Kamenica 2012). Incentives can also increase and improve short-term effort (Bénabou and Tirole 2003), accuracy (Ashton 1990; Remus et al. 1998), and performance (Riedel, Nebeker and Cooper 1988; Sprinkle 2000; Garbers and Konradt 2014; Davis and Hyndman 2017). Incentives can increase the likelihood of uptake of a task (Pittman et al. 2008) and the likelihood of setting more difficult goals (Riedel et al. 1988). However, little research (if any) has examined how incentives might affect what people begin with when facing multiple tasks of differing difficulty.

At the core of my predictions is the idea that if people are incentivized to complete a set of tasks, they will be more apt to use a strategy that prioritizes success over one that prioritizes enjoyment. Thus, I examine whether incentives can affect not which task people choose to do, but which order they choose to do them in. If people believe that starting with difficult tasks is more likely to lead to successful completion of all tasks than is starting with easier ones, then people who are incentivized will be more likely (than those who are not incentivized) to begin with a more difficult task.

1.4 Contribution
My research contributes to the literature on how people approach goals that require completing both harder tasks and easier ones. I do this by identifying a factor that changes which type of task people prefer to begin with. Whereas most prior research in this area has examined whether
people start with easier tasks or harder ones, I examine not whether they start with one or the other, but instead when they are more likely to start with the easier tasks or the harder ones. In particular, I examine whether, when people are motivated by an incentive, they become more likely to start with a harder task, compared to when they are not so motivated. In some prior papers on this topic, participants generally were incentivized (e.g., Jin et al. 2015, Rusou, Amar, and Ayal 2020), and in others, they generally were not (e.g., most studies in Habbert and Schroeder 2020). None of these papers systematically varied the presence of incentives, and so we have little understanding thus far about how incentives and motivation affect people’s preferences to start with hard or easy tasks. It could be that, for example, if the participants in Jin et al. (2015) were not incentivized, their preferences for starting with difficult-first tasks would be lessened – or that participants in Rusou, Amar, and Ayal’s (2020) would have preferred to start with easy tasks to an even greater extent if they were not incentivized. Although my studies cannot conclusively answer such counterfactual questions about prior papers, I aim to shed light on what makes someone prefer to start with an easier task versus a harder one, and in so doing, suggest ways that managers and firms might be able to predict, and even influence, where their employees and consumers will begin such tasks.

1.5 The Current Research
In this paper, I examine situations where a person faces two tasks as part of a bigger goal or project: one task that is easier and one that is more difficult. I examine how incentives affect choices of which task to begin with. As outlined in previous sections, I predict that people will be more likely to begin with the difficult task when they are incentivized to complete the overarching goal or project than when they are not. Of course, many factors, including characteristics of the tasks themselves, can shape whether people prefer to start with an easy task
or a harder one. Thus, the baseline, non-incentivized preference may tilt more or less towards beginning with an easy task depending upon the particular situation. Nevertheless, I predict that, regardless of the baseline preference for beginning with an easy task, incentives will typically increase the proportion who start with a more difficult one.

I suggest that this effect of incentives arises for two reasons. First, I suggest that when people decide how to complete a series of tasks, they may weigh at least two considerations: whether they will succeed at completing the tasks, and whether they will enjoy the process of completing the tasks. Although both of these considerations may come to mind, I suggest that the motivation produced by an incentive can encourage people to give greater weight to considerations related to success than they would if there were no incentive. Second, I suggest that people have a lay theory that beginning with the more difficult task is more likely to lead to success than beginning with the easier task, but that people think they would more enjoy beginning with the easier task.

Thus, I predict that an incentive to complete all tasks leads to an enhanced prioritization of successfully completing the tasks. This, in turn, leads people to rely on their lay theory about success and to start with the difficult task instead of taking the more enjoyable path of starting with the easier task.

Of course, my predictions hinge on people having a belief or lay theory that starting with the difficult task is more likely to lead to success than starting with the easy task. I finally predict that, when that lay theory is not applicable, such as when starting with the easy task may be as or more likely to lead to success, incentives will no longer prompt people to start with the more difficult task.
Chapter 2: Experimental Studies

I test these hypotheses across a series of studies. Studies 1a-1d test the main effect of incentives on task-order preferences, showing that incentives increase the proportion of participants choosing to begin with the difficult task. Study 2 further tests this effect with real tasks and real incentives. Study 3 examines how incentives affect the prioritization of success, showing that people view choosing an order that promotes successful completion of the tasks as more important when they are incentivized, compared to when they are not. Studies 4a and 4b explore how people view the task orders, showing that people generally find the easy-first order to be relatively more enjoyable and the difficult-first order to be relatively more likely to lead to success. Finally, study 5 shows that when the difficult-first order no longer seems like the one most likely to lead to success, the effect of incentives on order choice is attenuated.

Across these studies, I operationalize difficulty in keeping with the prior literature, which has generally manipulated difficulty by manipulating effort required, time required, likelihood of task completion, and task description. For example, in Habbert and Schroeder (2020), the difficult tasks required more effort. Jin et al. (2015) similarly defined difficulty in terms of the amount of time or effort required. I focus primarily on manipulating the effort and time required and the task’s description. I support these manipulations with pre-tests and manipulation checks. In addition, where possible, I hold uncertainty about whether the tasks can be completed constant, so that participants know that both tasks can be completed but that one is simply harder than the other. I also designed my tasks so that they were different in nature from each other, so that the easy task could not be seen as providing training for the more difficult task (with the exception of study 5, where I intentionally manipulated this factor). I report the results of 9 studies (N = 4966, post exclusions), all of which are preregistered.
I report all conditions, outliers, and measures collected, and note any discrepancies when they have occurred.

2.1 Study 1a
Studies 1a through 1d examine whether adding an incentive for completing an overall project increases the likelihood of people choosing to complete the difficult tasks required for completion of the project before completing easy ones. These studies use a similar framework: participants are presented with two tasks (one difficult, one easy) that they must complete by a deadline. Participants in one condition learn that they will receive an extra bonus, incentive, or reward if they complete both tasks by that deadline, whereas participants in the other condition have the same deadline to complete both tasks but will not receive an incentive for meeting it.

In study 1a, I ask people to consider two tasks—negotiating a software contract and finding a new travel agent for their company—that they must complete at work. I describe one task (software negotiation) as difficult and the other (finding a new travel agent) as easier, and I tell some people that they will get an incentive, in the form of a bonus, if they complete the tasks on time. I predict that people will be more likely to start with the harder task when there is a prospect of receiving a bonus than when there is not.

2.1.1 Participants
I preregistered to recruit 800 participants (https://aspredicted.org/9DT_GV7) and received a sample of 803 participants from Prolific Academic. Consistent with my preregistration, I excluded 8 for failing an attention check, leaving me with a final sample of 795 (49% female, 50% male, 1% non-binary, $M_{age} = 38.6$ years).
In this and all studies, the attention check was a Winograd schema comprehension check (Levesque, Davis, and Morgenstern 2012), which required determining the correct pronoun-antecedent agreement for a sentence that was unrelated to the main scenario (e.g., “The lawyer asked the witness a question, but he was reluctant to answer it. Who was reluctant? The lawyer / The witness”).

2.1.2 Procedure
Participants were randomly assigned to either the incentive condition or the no-incentive condition and read the following scenario:

Imagine that, at your place of work, you are presented with two different tasks to complete. You need to complete both of them by the end of the week.

One task is more difficult: Your boss would like you to negotiate a better price on the company’s new contract with a software supplier. You know it is possible to get a discount because of the size of the software supplier. It will just take some time to figure out the best approach.

The other task is easier: Your boss would like you to find a travel agent in the area that would save money on the office’s travel needs. With the help of Google you know that you could find some good options.

Thus, in this study, as in the studies that follow, I made it clear that both tasks could be completed, but that one was more difficult than the other. Participants in the no-incentive condition simply read about the two tasks. Participants in the incentive condition also read a description of an incentive for completing both tasks on time:
Your boss tells you that if you negotiate a better software contract and save money on travel agents, you will get a bonus. If you are unable to complete both successfully you won’t get the bonus.

All participants then read and responded to, “You can do the tasks in any order, but you know you should complete them before the end of the week. Which task would you attempt to complete first?” Thus, in both conditions, all participants learned it was important to complete the tasks by the end of the week, but only those in the incentive condition learned that they would receive a bonus by doing so.

As a manipulation check, participants then read a description of each task (without the labels of “difficult” and “easy”) and were asked, “How difficult does this task appear to you?” They responded on a scale ranging from 1 (not at all) to 7 (extremely).

2.1.3 Results and Discussion
For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (incentive: present vs. absent) mixed ANOVA. The ANOVA revealed only a significant main effect of task ($F(1,793) = 2313.89, p < .0001, all other ps > 0.33$) with the difficult task appearing more difficult ($M = 4.83$) than the easy task ($M = 2.25$).

As predicted, participants in the incentive condition were more likely to choose to complete the difficult task before the easy task than participants in the no-incentive condition (60% vs. 50%, $\chi^2(1, N = 795) = 8.82, p = .003$, see Figure 1). This study provides initial evidence that when people are incentivized (vs. not incentivized) to complete a set of tasks that differ in difficulty, they are more likely to choose to do the difficult task before the easy one. Studies 1b through 1d examine the robustness of this effect using a variety of domains, tasks, and incentives.
2.2 Study 1b

Study 1a showed that incentives increase the likelihood of people choosing to do a harder task before an easier one, instead of an easier task before a harder one. Study 1b explores this effect in a different domain, while also testing whether my effect emerges even when the tasks are not explicitly labeled as “difficult” and “easy.” This change potentially makes the tasks better approximate what people might encounter in daily life and may reduce any perceived demand that arises from labeling the tasks as “easy” and “difficult.”

2.2.1 Participants

I preregistered (https://aspredicted.org/M8X_BKL) to recruit 400 participants on Prolific Academic, and I recruited 402. Consistent with my preregistration, I excluded one person for failing the attention check, leaving me with a final sample of 401 (49% female, 49% male, 2% non-binary, $M_{age} = 33.4$ years).
2.2.2 Procedure
Participants were randomly assigned to either the incentive condition or the no-incentive condition and read the following scenario, with the order of presentation of the difficult and easy tasks counterbalanced:

Imagine that a family member has asked you to complete two tasks for them in the next two days. They want you to complete both of them in the next two days, but they don't care in what order you do them.

Oil change task: your family member asks you to call local auto shops to find them the best deal on oil changes. They would like you to find one for cheaper than $60 and schedule an appointment. This will take some time, but you know there are places in your area that offer a deal this good. You will have to call around to several stores to find out where the best offer is.

Amazon task: your family member wants you to pack up an Amazon return and set it on the doorstep. This should be straightforward and you will definitely be able to get the item packaged up in time.

Participants in the no-incentive condition simply read the task descriptions. Participants in the incentive condition also read that they would receive an incentive if they completed both tasks in the next two days:

Note: If you are able to schedule an oil change for cheaper than $60 and get the return item packaged, your family member will give you $50 as a thank you. If you don’t complete both tasks successfully, you will get nothing.
All participants then chose which task they would like to complete first. Thus, as in study 1a, all participants were told it was important to complete the tasks in the next two days, but only those in the incentive condition learned that they could earn money by doing so.

As a manipulation check, participants then read a description of each task and were asked, “How difficult does this task appear to you?” For each task, they responded on a scale that ranged from 1 (not at all) to 7 (extremely).

2.2.3 Results and Discussion
For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (incentive: present vs. absent) mixed ANOVA. The ANOVA revealed only a significant main effect of task ($F(1, 399) = 576.64, p < .0001$, all other $ps > 0.12$) with the difficult task appearing more difficult ($M = 3.53$) than the easy task ($M = 1.67$).

For the main analysis, participants in the incentive condition were more likely to choose to complete the difficult task before the easy task than participants in the no-incentive condition (52% vs. 34%, $\chi^2(1, N = 401) = 13.44, p = .0002$, see Figure 1). Thus, the effect of incentives on order preferences persists in a new domain and arises even without the tasks being explicitly labeled as “difficult” and “easy.”

2.3 Study 1c
Study 1c further explores the generality of the effect of incentives by using an incentive that is not monetary, but rather described in terms of time. As in studies 1a and 1b, participants are presented with two tasks (one difficult, one easy) that they must complete by a deadline. In the incentive condition, I tell them that if they are able to complete the tasks by the deadline, they will have extra time available to spend with friends. Participants in the no-incentive condition
could plausibly infer that completing the tasks by the deadline would give them extra free time later, but that fact is not highlighted to them. Thus, in this study, the incentive is not imposed by an outside agent, but rather is a natural consequence of completing the tasks on time. This study thus allows me to test a subtler form of incentive. Also, to the extent that an incentive promised by someone else (e.g., a supervisor) might signal something about the tasks (e.g., how important they are to that supervisor), study 1c’s incentive should reduce those signals.

2.3.1 Participants
I preregistered (https://aspredicted.org/QZF_349) to recruit 400 participants and obtained a sample of 400 participants from Prolific Academic. Consistent with my preregistration, I excluded 5 for failing the attention check, leaving me with a final sample of 395 (49% female, 49% male, 2% non-binary, $M_{\text{age}} = 34.8 \text{ years}$).

2.3.2 Procedure
Participants were randomly assigned to either the incentive condition or the no-incentive condition and read the following scenario:

Imagine that you are preparing to move to a new city in a month. Right now you have two important items on your to-do list for the move. You know you should complete both before the end of the week, but it doesn’t matter in what order you do them.

One task is more difficult: You need to call around to different homeowners insurance providers and negotiate the best possible price. You know it is possible to get a discounted rate, but it will definitely take some time to figure out the best approach and make the calls.
The other task is easier: You need to compile a list of moving companies in the area.

With the help of Google you know that you could find some good options.

Participants in the no-incentive condition simply read the task descriptions. Participants in the incentive condition also read about an incentive for completing both tasks by the end of the week:

As an added bonus, if you are able to get both of these tasks done before the end of the week, you’ll be able to take a day off next week to hang out with friends before you leave. If you don’t get the tasks done this week, you won’t be able to find the time to hang out with them because of other schedule constraints.

All participants then read and responded to, “You can do the tasks in any order, but you know you should complete them before the end of the week. Which task would you attempt to complete first?”

As a manipulation check, participants then read a description of each task and were asked, "How difficult does this task appear to you?" For each task, they responded on a scale ranging from 1 (not at all) to 7 (extremely).

2.3.3 Results and Discussion
For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (incentive: present vs. absent) mixed ANOVA. The ANOVA revealed only a significant main effect of task ($F(1, 393) = 934.02, p < .0001, \text{all other } ps > 0.44$) with the difficult task appearing more difficult ($M = 4.95$) than the easy task ($M = 2.54$).
For the main analysis, participants were more likely to choose to complete the difficult task before the easy task in the incentive condition than in the no-incentive condition (65% vs. 52%, $\chi^2(1, N = 395) = 6.07, p = 0.01$, see Figure 1). This study provides further evidence that incentives affect task order decisions, even with a somewhat subtler, non-monetary incentive that is not imposed by someone else.

2.4 Study 1d
Studies 1a through 1c have shown that people are more likely to choose to do a difficult task before an easier one when they have an incentive to complete both tasks. One question is whether the tasks seem more bundled or linked in the incentive condition than in the no-incentive condition. That is, is it the case that in the no-incentive condition, participants infer that partial progress (e.g., only finding a moving company or only packaging the Amazon return) is helpful, but participants in the incentive condition infer that partial progress is less helpful because the incentive is only awarded for full completion of both tasks? Although it is not immediately obvious how this could explain why incentives influence the order in which people tackle the tasks, my predictions do not hinge on incentives linking or bundling the tasks. As such, study 1d tested a situation where, in both conditions, both tasks must be completed for progress on either task to be meaningful: thus, the tasks are already bundled or linked in the no-incentive condition, and so any effect of incentives cannot be attributed to this sort of bundling.

One might also wonder if the results of studies 1a through 1c were driven by people believing that the easier task would take less time than the more difficult task. To investigate this possibility, study 1d equated the expected amount of time that each task would take, by stating that each task should take approximately an hour to complete. In this way, the tasks should primarily differ on their difficulty levels – not time required or likelihood of completion.
2.4.1 Participants
I preregistered (https://aspredicted.org/24H_RTC) to collect 400 participants from Prolific Academic and received a sample of 401 participants. Consistent with my preregistration, I excluded six participants for failing the attention check, leaving me with a final sample of 395 (51% female, 48% male, 1% non-binary, $M_{age} = 38.8$ years).

2.4.2 Procedure
Participants were randomly assigned to either the incentive condition or the no-incentive condition and read the following scenario:

Imagine that you are preparing to switch to a new insurance provider. With this new provider, you are going to start new homeowner’s insurance and car insurance policies.

You need to complete both applications in the next two days for them to go into effect when your current policies expire, but it doesn’t matter in what order you do them.

Although one application is more difficult than the other, each one should take approximately an hour to complete.

The car insurance application is more difficult: Because of the company’s policies and your unique situation, you will need to talk to an agent over the phone to go through the details.

The homeowner’s insurance application is easier: All you’ll need to do will be to submit your identification and address and fill out the online application.

Participants in the no-incentive condition simply read about the two tasks. Participants in the incentive condition also read a description of an incentive for completing both tasks on time:
As an added bonus, if you are able to get both of these applications done in the next two days, you’ll get a 25% discount on both policies because of a promotion that the company is running. You will get this discount only if both are completed in the next two days.

All participants then responded to, “You can do the applications in any order, but you know you should complete them in the next two days. Which application would you attempt to complete first?” Thus, in both conditions, both tasks were estimated to take approximately an hour, and both applications had to be completed in the next two days for either application to go into effect. However, in one case, completion in the next two days also brought a discount.

As a manipulation check, participants then read a description of each task and were asked, “How difficult does this task appear to you?” They responded on a scale ranging from 1 (not at all) to 7 (extremely).

### 2.4.3 Results and Discussion

For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (incentive: present vs. absent) mixed ANOVA. The ANOVA revealed only a significant main effect of task (\(F(1, 393) = 915.59, p < .0001, \text{all other } ps > 0.23\)) with the difficult task appearing more difficult (\(M = 4.70\)) than the easy task (\(M = 1.98\)).

For the main analysis, participants were more likely to prefer to complete the difficult task before the easy task in the incentive condition than in the no-incentive condition (63% vs. 49%, \(\chi^2(1, N = 395) = 8.30, p = .004\), see Figure 1). Thus, even when the tasks take the same amount of time and are inherently linked together even in the no-incentive condition (because both policies had to be finalized for either policy to take effect), adding an incentive for completing both tasks still prompts people to be more likely to begin with the more difficult task.
2.4.4 Discussion for Studies 1a-1d
Overall, studies 1a through 1d show consistent evidence that, when people must complete a harder task and an easier task, adding an incentive for completing both tasks affects the order in which people choose to attempt those tasks, causing people to be more likely to begin with the difficult task. Next I will explore this effect using real behavior and real incentives.

2.5 Study 2
Studies 1a through 1d have shown that incentives affect the order in which people prefer to complete hard and easy tasks, but these studies all involve hypothetical decisions. Study 2 examines whether incentives increase the adoption of the difficult-first order when the incentives and tasks are real. In study 2, participants were told that they would be completing two tasks of differing difficulty as part of a lab session, but that they could decide the order in which to complete these tasks. One group of participants learned that they would receive a bonus—a bag of treats—if they successfully completed both tasks by the end of the session.

2.5.1 Participants
This study contains two preregistered subsamples from the university participant pool. Because the pool is limited, I was only able to recruit 221 participants in my preregistered fall-semester study (https://aspredicted.org/91P_8GP), so I preregistered to run a second sample in the spring (N = 191) and to combine it with the fall data (https://aspredicted.org/25J_MGL). My combined sample was 412 undergraduate students. Consistent with my preregistrations, I excluded 10 participants for failing the attention check, and 3 from the spring sample who indicated that they had participated previously, leaving me with a final sample of 399 (58% female, 41% male, 1% non-binary, $M_{\text{age}} = 19.2$ years).
2.5.2 Procedure
Participants, who all came to the lab to take part in this study, were randomly assigned to either the incentive condition or the no-incentive condition. All participants read that they would be completing two tasks and that they would be able to choose the order in which they completed them. They then read:

One task is more difficult: We’ll give you clues to find some nearby locations on campus. We’ll also give you a unique token. Once you have found the locations, we’d like you to take a picture of your token at each location. When you return to the lab, the experimenter will verify that you’ve taken pictures of your token at the right locations, and they will give you a code to continue the survey. If you aren’t able to take the pictures in time, you will still get participation credit but won’t be able to complete the survey.

The other task is easier: We’ll give you a simple task to complete on the computer. Once you have completed it, you will be able to continue the survey. If you aren’t able to finish the task in time, you will still get participation credit but won’t be able to complete the survey.

We would like you to complete both of these tasks before the end of the lab session, but you can still leave on time even if you don’t quite finish them both.

Participants in the no-incentive condition simply read the task descriptions. Participants in the incentive condition also read that they would receive an incentive if they completed both tasks within the study time limit:
As an added bonus, if you are able to complete both of these tasks before the end of today’s lab session, we will give you a cotton tote bag containing a Kind Bar, a Ghirardelli Chocolate Square, a spiral notebook, and a Pilot G2 Pen.

Participants in the incentive condition also saw a picture of the items they would receive. All participants then chose which task they would like to complete first. Thus, similar to other studies, all participants were told it was important to complete the tasks within the time limit, but only some were incentivized for doing so.

As a manipulation check, participants then read a description of each task and were asked, “How difficult does this task appear to you?” They responded on a scale ranging from 1 (not at all) to 7 (extremely). Participants then completed the tasks in the order that they selected.

Finally, participants responded to a free-response prompt that asked them why they chose the order they chose. I include these open-ended responses with my posted data. Following this prompt, I asked participants in the spring sample whether they had previously participated in this study.

2.5.3 Results and Discussion
For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (incentive: present vs. absent) mixed ANOVA. The ANOVA revealed a significant main effect of task ($F(1, 397) = 1149.40, p < .0001$) with the difficult task appearing more difficult ($M = 4.67$) than the easy task ($M = 1.88$). There was a significant interaction between incentive and task ($F(1, 397) = 7.24, p = .007$) which reflects a slightly smaller gap between the difficult and easy tasks when the incentive is present ($Ms = 4.62$ and $2.06$, respectively, $t(196) = 22.47, p < .0001$) versus absent ($Ms = 4.71$ and $1.71$, respectively, $t(201) = 25.41, p < .0001$).
As predicted, incentivized participants were more likely to choose to complete the difficult task before the easy task than were non-incentivized participants (38% vs. 28%, $\chi^2(1, N = 399) = 4.84, p = .03$). Although one task in my experiment was indeed harder than the other, I intentionally made both tasks short enough to be completed within one lab session to minimize the burden and stress on my participants and research assistants. Indeed, 100% of participants successfully completed the tasks in both the no-incentive and incentive conditions.

Thus, study 2 shows that incentives increase the rate at which participants do hard tasks before easy ones, even in the context of real behavior and real incentives.

2.6 Study 3
I suggest that the effect of incentives on preferred order arises in part because, when participants are incentivized, they give greater weight to considerations related to succeeding at the tasks compared to when they are not incentivized. That is, when people make decisions about completing a series of tasks, they could consider whether they will succeed at completing those tasks, and they could consider whether they will enjoy completing those tasks. Both considerations may often come to mind, but I suggest that an incentive can lead people to give greater weight to success-related considerations than they would have otherwise. I further suggest that people have a lay theory or belief that beginning with the easier task may promote enjoyment, but that beginning with the harder task is relatively more likely to promote successful completion of the tasks. Thus, when people are incentivized, their enhanced prioritization of success may lead them to begin with the harder task instead of the easier one.

Study 3 examines the first part of this framework by examining whether incentives cause people to be more likely to prioritize completing the tasks in an order that leads to success.
2.6.1 Participants
I preregistered (https://aspredicted.org/CP2_Z4Y) to collect 800 participants from Prolific Academic and received a final sample of 801 participants. Consistent with my preregistration, I excluded 11 participants for failing the attention check, leaving a final sample of 790 (49% female, 49% male, 2% non-binary, $M_{age} = 38.5$ years).

2.6.2 Procedure
Participants were randomly assigned to either the incentive condition or the no-incentive condition and read the same scenario from study 1a, where they had to negotiate a software contract and find a travel agent. Participants in the no-incentive condition simply read about the two tasks. Participants in the incentive condition also read that they would get a bonus for completing both tasks on time, as in study 1a.

All participants then read, “you have to do both tasks this week, but you can choose the order in which you do them” and then responded to the main dependent variable, “When you think about which order you would choose, what would be more important to you: choosing an order that would help you successfully complete both tasks, or choosing an order that would make the experience of completing the tasks more enjoyable for you?” Those in the incentive condition also read, “Remember, if you are able to complete both tasks by the end of the week, your boss has promised you a bonus.”

The dependent variable was measured on a scale ranging from -100 (Definitely choosing an order that would make the experience enjoyable) to +100 (Definitely choosing an order that helps me successfully complete both tasks), with a midpoint labeled “no preference.” The order in which success or enjoyment was mentioned was counterbalanced both for the text of the question and the scale endpoints.
As a manipulation check, participants read a description of each task and were asked, “How difficult does this task appear to you?” They responded on a scale ranging from 1 (not at all) to 7 (extremely).

### 2.6.3 Results and Discussion
For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (incentive: present vs. absent) mixed ANOVA. The ANOVA revealed only a significant main effect of task difficulty ($F(1, 788) = 1880.20, p < .0001, \text{all other } ps > .39$) with the difficult task appearing more difficult ($M = 4.78$) than the easy one ($M = 2.34$).

Choosing an order that led to successful task completion was more important to participants in the incentive condition. Participants in the incentive condition gave a higher rating, indicating a greater prioritization of success over enjoyment, than did those in the no-incentive condition ($M_{\text{incentive}} = 62.49 \text{ vs. } M_{\text{no incentive}} = 48.29, t(781.74) = 3.53, p = .0004$; degrees of freedom reflect a Welch’s two-sample test with assumptions of unequal variances).

Thus, study 3 shows that people care more about choosing an order that will lead to success when they are incentivized than when they are not. Next, I examine whether people generally believe that starting with the difficult task is more likely to lead to success than starting with the easy task.

### 2.7 Studies 4a and 4b: Enjoyable and Successful Orders
Thus far, I have shown that incentives lead people to be more likely to start with harder tasks instead of easier ones, and I have shown that when people are incentivized, they are more likely to report prioritizing an order that will lead to successful completion of all tasks, compared to when they are not incentivized. In studies 4a and 4b, I test my hypothesis that people have a lay
theory or belief that beginning with the easier task may be more enjoyable than beginning with the harder task, but that beginning with the harder task may be relatively more likely to lead to success. If this hypothesis is supported, it could explain why, when people are incentivized, they are more likely to begin with a harder task: incentives lead people to prefer the order that will be more likely to lead to success, and people believe that the difficult-first order is that order.

Studies 4a and 4b examine whether people indeed believe that beginning with an easier task is relatively more enjoyable but beginning with a harder task is relatively more likely to lead to success.

2.8 Study 4a

2.8.1 Participants
I preregistered (https://aspredicted.org/ZPH_H6S) to collect 400 participants from Prolific Academic and received a final sample of 401 participants. Consistent with my preregistration, I excluded 7 participants for failing the attention check, leaving me with a final sample of 394 (47% female, 50% male, 3% non-binary, \(M_{age} = 36.4\) years).

2.8.2 Procedure
Participants were randomly assigned to either the enjoyment condition or success condition. They read the no-incentive scenario from study 1c (where participants need to find homeowner’s insurance and a moving company).

Participants were told, “you have to do both tasks this week, but you can choose the order in which you do them.” They then responded to one of two main dependent variables, depending on condition. Those in the success condition were asked, “Which task would you start with if you wanted to make sure to successfully complete both tasks by the end of the week?” Those in the enjoyment condition were asked, “Which task would be more enjoyable to start with?” For each
question, participants selected between, “Doing the insurance task first” or “Doing the moving company task first.”

As a manipulation check, participants reread the description of each task and were asked, “How difficult does this task appear to you?” For each task, they responded on a scale that ranged from 1 (not at all) to 7 (extremely).

2.8.3 Results and Discussion
For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (target dimension: enjoyment vs. success) mixed ANOVA. The ANOVA revealed only a significant main effect of task difficulty ($F(1, 392) = 1128.49, p < .0001, all other $p$s > .60) with the difficult task appearing more difficult ($M = 4.87$) than the easy one ($M = 2.48$).

In the main analysis, participants considering which task they would start with if they wanted to successfully complete both tasks chose the difficult task more often than did those who were those considering which task would be more enjoyable to start with (59% vs. 24%, $\chi^2 (1, N = 394) = 52.24, p < .0001$, see Figure 2). In other words, the vast majority of participants thought that starting with the easy task would be more enjoyable, but they were much less likely to choose the easy task as the one that would maximize the odds of successful task completion.

Study 4b is a conceptual replication of these results with a different set of tasks.

2.9 Study 4b

2.9.1 Participants
I preregistered ([https://aspredicted.org/ZZS_71H](https://aspredicted.org/ZZS_71H)) to recruit 400 participants and obtained a sample of 402 participants from Prolific Academic. Consistent with my preregistration, I
excluded 3 participants for failing the attention check, leaving me with a final sample of 399 (49% female, 50% male, 1% non-binary, $M_{\text{age}} = 36.1$ years).

### 2.9.2 Procedure

Participants were randomly assigned to either the enjoyment condition or success condition. They read the no-incentive scenario from study 1a and study 3 (where the boss assigns an easy task of finding travel agents and a harder task of negotiating a software contract). Participants then responded to the same dependent measures as in study 4a.

### 2.9.3 Results and Discussion

For the manipulation check, I ran a 2 (task: difficult vs. easy) x 2 (target dimension: enjoyment vs. success) mixed ANOVA. The ANOVA revealed a significant main effect of task ($F(1, 397) = 1235.65, p < .0001$) with the difficult task appearing more difficult ($M = 4.91$) than the easy task ($M = 2.43$). There was a significant interaction between condition and dimension ($F(1, 397) = 7.02, p = .02$) which reflects a slightly smaller gap between the difficult and easy tasks in the enjoyment condition ($Ms = 4.74$ and 2.45, respectively, $t(188) = 19.18, p < .0001$) than the success condition ($Ms = 5.07$ and 2.40, respectively, $t(209) = 24.12, p < .0001$).

The main analysis revealed the same pattern as study 4a. Participants considering which task they would start with if they wanted to successfully complete both tasks chose the difficult task more often than those considering which task would be more enjoyable to start with (47% vs. 31%, $\chi^2 (1, N = 399) = 10.55, p = .001$, see Figure 2). Thus, again, the majority of participants thought that starting with the easy task would be more enjoyable, but they were reliably less likely to choose the easy task as the one that would maximize the odds of successful task completion.
2.9.4 Discussion of Studies 4a and 4b
People are more apt to say that the difficult-first order will lead to success than they are to say that it will bring them enjoyment, with the easy-first order seeming to promise more enjoyment. Of course, studies 4a and 4b do not shed light on whether these beliefs about success and enjoyment are accurate. I return to this question in the general discussion. Overall, however, these studies support the idea that the difficult-first order seems relatively more likely to lead to success than enjoyment, which may explain why people switch to this order when they are incentivized and are prioritizing success.

2.10 Study 5: When Starting with Harder Tasks May Not be Optimal
Thus far, my studies have shown that incentives increase the likelihood of people choosing to do a harder task before an easier one, instead of doing an easier task before a harder one. I argue this happens because incentives increase the importance people place on choosing an order that leads
to success (study 3) and because they believe that the difficult-first order is more likely to lead to success (studies 4a and 4b). This framework entails that if people no longer believe that the difficult-first order is more likely to lead to success, incentives will no longer increase the proportion of people doing the difficult task first. Study 5 tests this idea.

In study 5, I include a condition where participants might no longer expect the difficult-first order to lead to success. I do this by making the difficult and easy tasks similar to each other and by framing the easy task as a warm-up for the difficult one. With such a change, participants may no longer believe that the difficult-first order is more likely to lead to success. If my effects depend upon participants holding a lay theory that the difficult-first order is more likely to lead to success, I would no longer expect to see incentives affecting order when the situation calls into question the applicability of this lay theory.

2.10.1 Participants
I preregistered (https://aspredicted.org/B1L_763) to recruit 1000 participants on Prolific Academic, and I recruited 1003. Consistent with my preregistration, I excluded 6 participants for failing the attention check, leaving me with a final sample of 997 (49% female, 49% male, 2% non-binary, $M_{age} = 37.2$ years).

2.10.2 Procedure
Participants were randomly assigned to one cell of a 2 (incentive: present vs. absent) x 2 (task similarity: high or low) between-subject design. Those in the low-similarity conditions read the following scenario, adapted from study 1a’s materials:

Imagine that, at your place of work, you are presented with two different tasks to complete. You need to complete both of them by the end of the week.
One task is more difficult: Your boss would like you to negotiate a better price on the company’s new contract with a software supplier. You know it will be a challenge to get a discount because of the size of the software supplier. It will take some time to figure out the best approach.

The other task is easier: Your boss would like you to find a travel agent in the area that would save money on the office’s travel needs. With the help of Google and a few phone calls you know that you could find some good options.

Those in the high-similarity conditions faced the same difficult task, but the easy task was more similar to, and more of a natural precursor to, the difficult task:

The other task is easier: Your boss would like you to negotiate with the office’s travel agent to get a better price on the office’s travel needs. The travel agent has been flexible in the past, so with a little preparation, this should be easy. In fact, this negotiation could be a good warm-up for the software negotiation.

Participants in the no-incentive conditions simply read the task descriptions. Participants in the incentive conditions also read that they would receive a bonus if they completed both tasks by the end of the week. Finally, all participants read, “you have to do both tasks this week, but which would you like to attempt first?” They then chose which task they would complete first.

2.10.3 Results and Discussion
I predicted that, when task similarity was low, incentives would increase the proportion of participants choosing the difficult-first order, as before. When task similarity was high, I predicted that the effect of incentives would be attenuated because participants might no longer
believe that starting with the difficult task would be more likely to lead to success; they might instead see reason to start with the easy task to gain experience.

Indeed, I found that, when task similarity was low, participants chose the difficult-first order significantly more often when there was an incentive present, instead of absent (59% vs. 46%, $\chi^2(1, N = 511) = 8.72, p = .003$). However, the effect of incentives was no longer reliable when task similarity was high (35% vs. 37%, $\chi^2(1, N = 486) = 0.12, p = .73$, see Figure 3). To formally test the overall pattern, I ran a logistic regression, with a dependent variable of order choice (1 = difficult first). The independent variables were incentive (1 = incentive present), similarity (1 = high similarity), and their interaction. The incentive x similarity interaction was reliable ($b = -.59, SE = .26, p = .02, CI [-1.10,-.08]$). This interaction qualified a main effect of similarity ($b = -.37, SE = .18, p = .046, CI [-.73,-.01]$).

One might wonder if my similarity manipulation created demand to choose the easy-first order. Although this is possible, the effect of task similarity was much stronger in the incentive condition (59% vs. 35%, $\chi^2(1, N = 503) = 27.70, p < .0001, \varphi = .23$) than the no-incentive condition (46% vs. 37%, $\chi^2(1, N = 494) = 4.00, p = .046, \varphi = .09$), suggesting that task similarity mainly mattered when people were incentivized and thus highly focused on successful task completion. Such a pattern is consistent with my framework and less consistent with an overall demand account.
Thus, study 5 shows an important boundary of my effects. When participants have reason to believe that the difficult-first order is no longer more likely to lead to success, incentives no longer increase the proportion of participants choosing to do the difficult task first. This study provides further evidence that the current effects arise because incentives lead people to care more about choosing an order that will lead to success and because people generally believe that the difficult-first order is that order.
Chapter 3: General Discussion

When people need to complete difficult tasks and easy ones as part of an overarching project or goal, which do they choose to complete first? Across 9 studies, I find that the answer depends on whether they are motivated via an incentive to prioritize success and also on their beliefs about success. Studies 1a through 1d first show, across a variety of tasks, scenarios, and incentives, that people are more apt to begin with the difficult task when they have an incentive for completing both tasks than when they do not. Study 2 shows this effect with real incentives and real behavior. Study 3 then shows that people feel that choosing an order that increases their chances of completing the tasks successfully (vs. an order that increases their chances of enjoying the task-completion process) is relatively more important when they are incentivized.

Studies 4a and 4b probe beliefs about the tasks and show that people are more apt to identify the difficult task as their starting point when they are trying to maximize success than when they are trying to maximize enjoyment. Finally, study 5 shows that incentives no longer increase the proportion of people choosing the difficult-first order when the difficult-first order may no longer be more likely to lead to success. Taken together, these studies suggest that, when people are incentivized, they care more about completing the tasks in an order that will promote successful task completion. People often believe that the difficult-first order is the relatively more successful order, and so incentives prompt people to switch from an easy-first order, which may otherwise promise a more enjoyable experience, to a difficult-first one.

3.1 Contribution to the Literature

Recent literature has investigated people making choices between beginning projects by tackling easy tasks versus harder ones (Habbert and Schroeder 2020; Jin et al. 2015; KC et al. 2020;
Rusou, Amar, and Ayal 2020). Participants have often preferred to start with the easier tasks, even when it might have been optimal to start with the harder ones (Habbert and Schroeder 2020; KC et al. 2020; Rusou, Amar, and Ayal 2020). My findings identify one factor – increased motivation for completion of the overall project – that might affect which task people begin with. In some prior papers, participants were incentivized, and in others, they were not, but notably, I did not uncover any prior papers where incentives and motivation were systematically manipulated. My findings suggest that, in papers in which participants were not generally incentivized to complete both tasks (e.g., most studies in Habbert and Schroeder 2020), participants would be more apt to begin with the difficult tasks if motivation were heightened, but in papers in which participants already were incentivized (Jin et al. 2015; Rusou, Amar, and Ayal 2020), the choice of the difficult-first order might have been greater if incentives were much greater – or smaller if incentives were removed. (Indeed, Jin et al. 2015 find that people generally adopt the difficult-first order more often, and participants were incentivized in all of their studies.)

I also add to the literature by showing how introducing an incentive for completing an overall project or goal affects people’s preference for the order in which they tackle subgoals or subsidiary tasks. Rather than directly incentivizing people to choose one order or the other, I show that an incentive for overall goal completion can prompt people to focus more on successfully completing all subsidiary tasks and thereby affect their preferred ordering of those tasks. Thus, I show that motivation can affect not only what people choose to do (as prior research suggests), but also the order in which they choose to do it.
3.2 Practical Implications
My results could have applications in both managerial and consumer settings. For example, managers, knowing that completing difficult tasks first often improves performance (KC et al. 2020; Rusou, Amar, and Ayal 2020), may wish to influence the order in which their team members complete tasks while still allowing those team members some autonomy and the ability to choose the best path for themselves. Judicious use of incentives may allow managers to subtly influence the order in which their team completes tasks – and thus boost overall performance – without overtly requiring tasks to be completed in a set order.

Consumers may also benefit from being aware of the current effects. When booking a vacation, a person might find some aspects (e.g., choosing a hotel) easy but others (e.g., finding affordable flights at attractive times) difficult. If both the hard tasks and the easy tasks need to be done by a given deadline, but there is no clear required order for tackling the tasks, perhaps a consumer can be motivated to tackle the more challenging flight-booking task first by thinking about how fun the vacation will be, or how much leisure time they will have once they get travel planning out of the way. (After all, study 1c suggests that even simple incentives such as the promise of extra free time may be sufficiently motivating.) This may allow the consumer to complete the harder task before the easier one, which may increase the likelihood of the vacation being booked more quickly, less expensively, and with less stress overall.

3.3 Limitations and Future Directions
My studies focused on cases where participants had to complete two tasks (one easy and one hard) by a specific deadline. This paradigm allowed me to isolate the variables of interest, but of course, many situations are more complicated. People may face several tasks that span a range of difficulty levels or that do not have a hard-and-fast deadline. Although I would predict that my
general result would hold in such cases, with people being more likely to begin with harder tasks when incentivezed for overall project completion, future research could investigate more complex situations that involve a wider range of tasks and timelines.

Furthermore, although my studies show that people generally believe that the difficult-first order is more likely to lead to success, I do not establish whether this lay belief is accurate. Investigating the prevalence of such lay beliefs, their boundaries, and their accuracy would be a promising direction for future research.

Future research could also fruitfully investigate other motivators beyond incentives. That is, I showed that incentives for project completion can lead people to prioritize success and switch to completing more difficult task first. However, other factors can increase motivation beyond incentives, such as the task being more personally relevant, the task seeming more important, or the cost of failure being particularly high. I would welcome future research that investigates whether, as I would predict, such increases in motivation lead to effects like those seen here.

3.4 Conclusion
People often find themselves facing easy and difficult steps when completing a project or goal. Although it may be tempting to tackle the easy ones first, there are risks to letting the difficult ones languish. Here, I find that when people are incentivized to complete the project or goal, they are more apt to begin with more difficult tasks. People may thus find it productive to incentivize themselves to complete complex projects and assignments, and firms may find it similarly productive to incentivize their employees and customers to complete complex tasks, so that the larger obstacles are tackled sooner rather than later.


