

WORKING PAPER

Auditor task prioritization: the effects of time pressure and psychological ownership

Prof. dr. Bart Dierynck
Dr. Christian Peters

KEY TAKE-AWAYS

The authors study how auditors prioritize their tasks and how differential task prioritization affects auditors' judgment performance. We leverage Conservation of Resources theory to build our predictions and test these predictions using three experiments with over 350 professional auditors. The first two experiments focus on investigating whether task prioritization affects auditors' judgment performance. Across two settings, the authors manipulate task order and find that prioritizing an easy task leads to lower judgment performance than prioritizing a difficult task. In their third experiment, the authors gave auditors discretion over task ordering and find that they tend to prioritize easy tasks over difficult tasks. Easy task prioritization is further exacerbated under higher time pressure and is least prevalent in conditions where time pressure is lower and psychological ownership is enhanced.

30/06/2024

Project
Number:
2023B04

 Foundation for
Auditing Research

Auditor Task Prioritization: The Effects of Time Pressure and Psychological Ownership

BART DIERYNCK*

Tilburg School of Economics and Management
Tilburg University
b.dierynck@tilburguniversity.edu

CHRISTIAN P. H. PETERS

Nanyang Business School
Nanyang Technological University
christian.peters@ntu.edu.sg

This version: June 2024

We thank two anonymous reviewers, Robin Beijen, Rob Bloomfield, Tjibbe Bosman, Jan Bouwens, Herman van Brenk (discussant), Eddy Cardinaels, Jeffrey Cohen, Anna Gold (discussant), Katlijn Haesebrouck (discussant), Ivan Hagenbeek, Rick Hatfield, Fabien Ize, Kathryn Kadous, Guido Kluth, Xiaoxing Li (discussant), Robin Litjens, Cardin Masselink, Jens van Mele, Sebastian Stirnkorb (discussant), Jesse van der Geest, Victor van Pelt, and participants at the 8th EIASM Workshop on Audit Quality, the Dutch Junior Accounting Meeting, the First EAA Virtual Annual Congress, Spark: Meeting of the Regions, the 2022 ENEAR Conference, KU Leuven, the University of Bristol, and Tilburg University for their helpful comments and suggestions. In addition, we are thankful to the professional auditors who participated and gratefully acknowledge research funding from the CentER Research Institute for Economics and Management at Tilburg University. Christian Peters gratefully acknowledges NTU for his start-up grant.

Jeannette Dekkers-Akkermans' help with arranging the experimental sessions is greatly appreciated.

* Corresponding author: Tilburg University, Warandelaan 2, Postbox 90153, 5000 LE Tilburg, The Netherlands. E-mail: b.dierynck@tilburguniversity.edu. Telephone: (+31) 13 466 26 82.

AUDITOR TASK PRIORITIZATION: THE EFFECTS OF TIME PRESSURE AND PSYCHOLOGICAL OWNERSHIP

ABSTRACT

We study how auditors prioritize their tasks and how differential task prioritization affects auditors' judgment performance. We leverage Conservation of Resources theory to build our predictions and test these predictions using three experiments with over 350 professional auditors. The first two experiments focus on investigating whether task prioritization affects auditors' judgment performance. Across two settings, we manipulate task order and find that prioritizing an easy task leads to lower judgment performance than prioritizing a difficult task. In our third experiment, we give auditors discretion over task ordering and find that they tend to prioritize easy tasks over difficult tasks. Easy task prioritization is further exacerbated under higher time pressure and is least prevalent in conditions where time pressure is lower and psychological ownership is enhanced.

Keywords: Auditing, easy task prioritization, time pressure, psychological ownership.

JEL Classifications: M42, C91, M49, D02

1. INTRODUCTION

Auditing standards require auditors to plan and control their work effectively (American Institute of Certified Public Accountants [AICPA] 2012). Work planning is vital to an effective and efficient audit and implies that auditors must determine the order in which they will complete the audit tasks assigned to them. Typically, audit tasks assigned to an auditor vary in task difficulty. Task difficulty refers to the amount of attentional capacity or cognitive processing that a task requires (Kahneman 1973; Bonner 1994; Bonner 2008, p. 159). Despite that ordering audit tasks is a core aspect of an audit engagement, virtually no research directly examines the performance effects of task ordering and how auditors order tasks that vary in difficulty. In this study, we first investigate whether the ordering of easy and difficult audit tasks influences auditors' judgment performance. Second, we investigate whether auditors prioritize easy or difficult audit tasks and how this prioritization is interactively determined by time pressure and psychological ownership.

We leverage conservation of resources (COR) theory to investigate our research questions (Hobfoll 1989; 2001). The basic tenet of COR theory is that individuals have limited resources and are motivated to protect their current resources and acquire new resources. Halbesleben et al. (2014) propose a goal-focused definition of resources and define resources as 'anything that helps an individual to attain a goal.' In an auditing setting, we focus specifically on cognitive resources such as cognitive capacity, motivation, willpower, self-discipline, and vigilance. Those resources are known to be (i) crucial to successfully complete an audit task and (ii) a scarce resource implying that auditors are motivated to protect these resources, which is the basic tenet of COR theory (Halbesleben et al. 2014; Hurley 2015; 2019; Mullis and Hatfield 2018). COR theory further states that executing a task depletes cognitive resources but also produces cognitive resources upon completion of the task. At this point, task difficulty enters the equation as a difficult

task depletes more cognitive resources than an easy task but also produces more cognitive resources upon task completion (Hobfoll et al. 2018; Hurley 2019; Mullis and Hatfield 2018).

As completing easy tasks is often considered a minimum to stay in the audit profession, completing easy tasks only provides minimal rewards. Thus, when auditors prioritize easy tasks, they deplete resources without significant resource gains. This resource depletion activates a defensive posture: auditors will conserve their remaining resources by reducing cognitive effort on the subsequent difficult task. Reducing cognitive effort results for instance in taking shortcuts when applying the audit procedures, being less skeptical, and not consulting colleagues when needed. Reduction of cognitive effort will impair an auditor's performance in the difficult task as, all else equal, performance in difficult tasks is sensitive to the invested cognitive effort. Auditors that first approach the difficult task are expected to have sufficient cognitive resources to do the easy task. They are also unlikely to suffer from depleted resources when starting the easy task because the completion of the difficult task is expected to generate significant resource gains. Overall, as prioritizing the easy task leads to a situation where an auditor's cognitive resources are diminished when reaching the difficult task, we predict based on COR theory that easy task prioritization will impair overall auditor performance.

When auditors have discretion over task ordering, they trade off the resource losses and the potential future resource gains associated with the tasks in their task set. According to the *primacy of resource losses* principle, which is a core principle of COR theory, immediate resource losses are disproportionately more salient compared to potential resource gains (Halbesleben et al. 2014; Hobfoll 1989; 2001). As a result, the immediate resource losses of difficult tasks loom disproportionately larger than those of easy tasks, inducing auditors to prioritize easy over difficult tasks. This leads to the prediction that auditors will prioritize easy tasks, all else equal (H1).

Time pressure is endemic in the auditing environment (DeZoort and Lord 1997; Pietsch and Messier 2017). COR theory predicts that when job demands are high, such as in conditions with higher time pressure, auditors will more defensively attempt to protect their cognitive resources (Demerouti et al. 2001). One such defensive attempt involves overly focusing on minimizing the resource losses associated with a given task, instead of trading off those losses against resource gains (Lee and Ashforth 1996; Rubino et al. 2012). As a result, under higher time pressure, the principle of primacy of resource losses is expected to be stronger, leading to our second prediction that higher time pressure will exacerbate auditors' easy task prioritization (H2).

Broadening the auditors' view in a way that potential resource gains are better incorporated can help to counter the primacy of resource losses. Psychological ownership, which in our setting is defined as an auditor's feeling that a task is theirs (Pierce et al. 2001; 2003), could be helpful here. Psychological ownership will increase the potential resource gains associated with a difficult task more than the potential resource gains associated with an easy task. The reason is that auditors will experience a greater feeling of efficacy and effectance after completing a difficult task when they feel the task is "theirs" (Pierce and Jussila 2011; Pierce et al. 2009). Therefore, psychological ownership could potentially alleviate easy task prioritization. However, trading off potential resource gains with immediate resource losses is unlikely to occur when time pressure is higher because higher time pressure induces a narrow focus on resource losses. (e.g., Lee and Ashforth 1996). As a result, we predict that easy task prioritization is most prevalent when time pressure is higher, followed by when time pressure is lower and psychological ownership is limited, and least prevalent when time pressure is lower and psychological ownership is enhanced (H3).

We conduct three experiments to test our predictions. In the first two experiments, we test whether easy task prioritization reduces task performance. Study 1 features a setting with two tasks that strongly differ in task difficulty and where potential learning effects are absent due to the

different nature of the tasks. Study 2 complements Study 1 and uses two tasks that are similar in nature, where learning effects could be present, but vary in difficulty. This setup allows us to keep other task-specific differences constant but potentially introduces learning effects. Combining Study 1 and 2 allows us to understand the performance effects of easy task prioritization. Study 3 uses the same tasks as Study 2 and gives auditors discretion over task ordering. This setup allows us to investigate whether auditors prioritize easy tasks and how this task prioritization is interactively determined by time pressure and psychological ownership.

Study 1 is a 1×2 between-participants experiment with 114 professional auditors. Participants need to execute two tasks: an audit of cash balances as the easy task and step one of a goodwill impairment test as the difficult task. We manipulate the order in which participants conduct these tasks as either easy-difficult or difficult-easy. We find that performance in the easy task does not differ depending on whether the easy task is prioritized or not. However, performance in the difficult task is lower when the difficult task is conducted after the easy task. Furthermore, and in line with our theory, the performance difference in the difficult task manifests itself in detecting ‘deep issues’, which require a relatively larger amount of cognitive resources, but not in detecting ‘surface issues’, which require less cognitive processing. As easy task prioritization does not influence performance on the easy task but does lead to weaker performance on the difficult task, overall task performance is impaired by easy task prioritization.

Study 2 is a 1×2 between-participants experiment with 75 professional auditors. As in Study 1, we manipulate the task order as easy-difficult or difficult-easy. In both tasks, participants have to verify the mathematical accuracy of discounted cash flow models. Difficulty across tasks is varied by changing the number of information cues. Since both tasks are similar, there are potential learning opportunities between tasks, implying that considering performance over the two tasks is most appropriate to test for performance effects of easy task prioritization as

participants naturally perform better in the second task. In line with our predictions, we find that the overall performance is lower when the easy task is prioritized compared to when the difficult task is prioritized.

Study 3 is a 2×2 between-participants experiment with 177 professional auditors using the same tasks as in Study 2. In this study, auditors decide themselves which task they prioritize. We manipulate psychological ownership (enhanced or limited) and time pressure (higher or lower). In line with Hypothesis 1 and 2, we find that auditors tend to prioritize easy tasks over difficult tasks and that easy task prioritization is stronger when time pressure is higher compared to when time pressure is lower. Consistent with Hypothesis 3, we find that the condition with lower time pressure and enhanced psychological ownership is the one where easy task prioritization is least prevalent, followed by the condition with lower time pressure and limited psychological ownership. Easy task prioritization is most prevalent in the higher time pressure conditions.

Our findings provide several contributions. First, this study is among the first to examine how auditors use their discretion over task ordering. A better understanding is important as auditors of all levels have some degree of task discretion (e.g., Morrill et al. 2012), and standards provide little guidance to auditors. A notable exception is Mocado (2022), who examines how the subjectivity of task criteria influence auditors' ordering of audit tasks. We first show that prioritizing easy tasks reduces auditors' judgment performance. Next, auditors use their task discretion in a way that leads to the prioritization of easy tasks. These findings contribute to the auditing literature, inform audit practice, and also contribute to the nascent literature on easy task prioritization (see for instance Arshad et al. 2022; Ibañez et al. 2018).

We also contribute by investigating the consequences of time pressure and psychological ownership in auditing. A large body of prior literature documents that time pressure has an inverted-U relation with judgment performance (DeZoort and Lord 1997; Bowrin and King 2010;

Pietsch and Messier 2017). Whereas these studies mainly focus on how other variables moderate the ramifications of time pressure (see for instance Pietsch and Messier 2017 for a review), our results are consistent with COR theory and show how a potential intervention is affected by time pressure. That is, higher time pressure causes auditors to narrowly focus on minimizing resource losses instead of making trade-offs between resource gains and losses. This finding is important for audit firms as it shows that interventions aimed at improving resource gains for auditors may not materialize in settings with higher time pressure.

Our findings also contribute to the literature on psychological ownership in general and in auditing in particular (e.g., Bauer et al. 2023; Holmstrom 2023). Although the literature on psychological ownership has documented numerous positive organizational consequences (e.g., Dawkins et al. 2017; Zhang et al. 2021), no study yet has examined how psychological ownership interacts with time pressure. The auditing setting is an appropriate setting to examine this as time pressure is often high in auditing firms. Our finding that the intended benefits of increasing psychological ownership may only materialize when time pressure is not too high enriches the tradeoff audit firms make when deciding about interventions to increase psychological ownership.

2. BACKGROUND LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1 Conservation of Resources Theory

We rely on conservation of resources (COR) theory to better understand (i) whether easy task prioritization has performance effects, (ii) whether auditors engage in easy task prioritization, and (iii) how time pressure and psychological ownership drive it. The fundamental tenet of COR theory is that individuals are motivated to protect their current resources and acquire new resources. In the auditing setting, we will focus on cognitive resources. Examples of cognitive resources that are needed to successfully complete an audit task include, yet are not limited to, cognitive capacity,

motivation, willpower, self-discipline, resilience, self-efficacy, and vigilance. Individuals strive to obtain, retain, foster, and protect their resources because they are needed to realize desirable outcomes and avoid undesirable outcomes (Hobfoll 1989, 2001). Auditors, for instance, need cognitive resources to maintain focus, complete audit tasks, and make judgments and decisions. Realizing desirable and avoiding undesirable outcomes generates resource gains, but individuals first need to invest resources. This is the resource investment principle of COR theory. Combining the resource investment principle with the assumption that individuals have a limited amount of cognitive resources leads to a conservation tenet whereby individuals are motivated to mitigate the loss of resources and to keep resource costs below resource gains.

The resources one has available is important for task performance. Halbesleben (2010), for instance, finds that nurses with depleted resources are more likely to take a defensive posture with their remaining resources, resulting in nurses working around the safety procedures and leading to more occupational injuries. Halbesleben (2010) argues that workarounds arise because nurses' reasoning is that adhering to safety procedures requires additional resources that are not expected to lead to sufficient gains. In a survey study guided by COR theory, Sun and Pan (2008) find that employees with reduced resources perform worse at their job. In a field experiment, Chen et al. (2009) examine the effect of providing additional resources in the context of a digital transformation. They find an increase in IT users' efficacy among those that were exposed to an intervention aimed to generate additional resources.

2.2 Easy Task Prioritization and Performance in Audit Tasks

To predict the performance effects of easy task prioritization, the amount of resources available at the moment when starting the difficult task is important. When the difficult task is approached first, those resources will be higher compared to when the difficult task is approached after the easy task has been completed. The reason is that completing an easy task reduces the

overall resources available because resource gains of easy tasks are often lower than invested resources (Pierce et al. 2009). That is, Pierce et al. (2009) argue that easy tasks create conditions that make it harder for people to perceive their accomplishments as a result of their own skills and abilities. Instead, they attribute successful completion of easy tasks to routines and structures established by others. A decrease in one's available resources after completing an easy task is likely in auditing as being able to complete easy tasks is considered a minimum. This implies that internal (i.e. self-efficacy, feeling of accomplishment) and external (i.e. positive performance evaluations) rewards from completing easy tasks in auditing are rather low.

The desperation principle of COR theory further predicts that experiencing a reduction in the resources available leads to a defensive mode where one is increasingly focused on conserving one's remaining resources (e.g., Hobfoll 2001; Halbesleben et al. 2014). Such a defensive mode leads to a reduced investment of cognitive effort in the task, taking shortcuts, or workarounds (Hobfoll et al. 2018; Halbesleben 2010). Importantly, as long as resources are not completely depleted, individuals aim to get the work done but in a way that minimizes the investment of resources. Compared with auditors that start with the difficult task, auditors that first completed the easy task and experience a reduction of their available resources are thus likely to enter a defensive mode and invest less (cognitive) effort in the difficult task they are facing. As difficult tasks typically require high effort levels, we thus predict that performance in the difficult task will be lower when the difficult task is executed after the completion of an easy task compared to a situation where the difficult task is approached first.

All else equal, we do not expect performance differences in the easy audit task depending on the task order. Auditors that first complete the easy task are expected to have sufficient resources for the easy audit task. As completing difficult tasks often yield higher resource gains than resource losses, auditors that first complete the difficult task are likely to have gained

resources. Even if completing a difficult audit task would reduce resources, the effect on performance in the easy task will be small as easy tasks typically require less cognitive processing. Overall, assuming equal performance in the easy task and taking into account that performance in the difficult task will be lower in case of easy task prioritization, we predict lower overall performance when the easy task is approached first.

2.3 Easy Task Prioritization

We next use COR theory to examine whether auditors will prioritize an easy task over a difficult task when they have discretion over task order. Discretion over task order is common in auditing: auditors typically get a list of tasks, which vary in difficulty, that they need to complete before a deadline and can to a large extent choose themselves in which order they conduct the tasks. Auditors exercising task discretion trade off the potential resource costs of the audit tasks in their choice set against the potential resource gains of those tasks. While difficult tasks have higher potential resource gains than do easy tasks, they also require a higher resource investment.

According to COR theory's first principle, the primary driver of decisions about which tasks to execute first is the disproportionate salience of resource losses (Hobfoll 1989; 2001; Lee and Ashforth 1996). Resource losses are disproportionately more salient than resource gains meaning that those losses are perceived as disproportionately larger in magnitude, are felt immediately, and persist longer (Hobfoll et al. 2018). Assuming that auditors aim to conserve resources, we predict that auditors will prioritize easy tasks over difficult tasks. The reason is that easy tasks require less investment of resources than difficult tasks and immediate resource losses are weighed disproportionately more than future resource gains.

HYPOTHESIS 1: Auditors will prioritize easy tasks over difficult tasks, all else being equal.

2.4 Time Pressure

Time pressure in auditing has a significant impact due to stringent budgets and inflexible deadlines (Solomon and Brown 1992; DeZoort and Lord 1997). Archival and field studies consistently show that high deadline pressure can diminish audit quality (Lopéz and Peters 2012; Lambert et al. 2017; Persellin et al. 2019). Experimental research further explores factors influencing this relationship, suggesting an inverted-U effect where moderate time pressure enhances decision-making quality, while excessive pressure leads to cognitive overload and anxiety, impairing performance (e.g., Pietsch and Messier 2017; Glover 1997). High time pressure often forces auditors to adopt shortcuts or prematurely complete tasks (Hyatt and Taylor 2013).

COR theory predicts that when auditors experience time pressure, they will experience their resources as being threatened (Bakker and Demerouti 2007; Demerouti et al. 2001; Hobfoll 1989; 2001). In the face of threatened resources, individuals are more likely to engage in defensive attempts to protect these resources and prevent unnecessary resource losses (e.g., Hobfoll et al. 2018, Lee and Ashforth 1996; Rubino et al. 2012). One such a defensive attempt is to narrowly focus on minimizing resource losses while ignoring the potential resource gains associated with a task (e.g., Halbesleben et al. 2014; Hobfoll 2001). Following COR theory, we expect that, under higher time pressure, auditors will narrowly focus on minimizing resource losses rather than weighing those potential losses against potential resource gains. As difficult tasks require more resources than do easy tasks, we predict that the prioritization of easy tasks will increase when time pressure is higher. This leads to the following hypothesis.

HYPOTHESIS 2: Auditors are more likely to prioritize easy tasks over difficult tasks when time pressure is higher than when time pressure is lower.

2.5 Psychological Ownership and Time Pressure

Psychological ownership—namely, the feeling of being psychologically tied to an object and as though the target of ownership is theirs (Pierce et al. 2001; 2003)—is a mechanism that can

influence the perceived resource gains associated with audit tasks. Prior literature in organizational behavior shows that feelings of ownership are common in organizations and can be directed toward various levels of the organizational context, such as the organization itself, the job, the group, or the work (e.g., Pierce and Jussila 2011; Van Dyne and Pierce 2004). Psychological ownership over one's work has been shown to increase organizational commitment, organization-based self-esteem, contributions to the team, commitment, and satisfaction (e.g., Bauer et al. 2023; Van Dyne and Pierce 2004; Wang et al. 2019). On the other hand, psychological ownership can have dark sides for the organization, for example, by producing territorial behavior (Brown et al. 2014; Wang et al. 2019) or by causing client managers to disclose less negative information to auditors (MacKenzie 2019).

According to psychological ownership theory, feelings of ownership allow individuals to satisfy three needs (i.e., the *roots* of psychological ownership): a sense of belonging, a feeling of self-identity, and a feeling of efficacy (Pierce et al. 2001; 2003; Van Dyne and Pierce 2004).¹ We argue based on prior literature that each of the three needs is more likely to be satisfied by difficult tasks rather than easy tasks (Pierce et al. 2009; Pierce and Jussila 2011). First, difficult tasks challenge auditors and require more of their skills, abilities, and motivation than do easy tasks, giving auditors a greater feeling of efficacy upon completion of difficult tasks (Bonner 2008; Pierce et al. 2009). Second, completing difficult tasks provides more opportunities for self-knowledge; auditors are more likely to identify with the difficult aspects of their job than with the easy aspects (Pierce and Jussila 2011). Third, auditors are more likely to develop a sense of belonging and identify with their work when performing difficult tasks (Porteous 1976). As a result,

¹ In an organizational context, a sense of belonging refers to the feeling when individuals come to dwell in their work and for whom the job is central to their identity. The self-identity motive refers to organizational members who take on appealing aspects of their job as parts of their identity (i.e., as opportunities for self-revelation). Finally, the effectance motive can be described as the tendency to explore one's external environment (White 1959). That is, being able to control one's surroundings gives rise to feelings of efficacy (Pierce and Jussila 2011).

we predict that psychological ownership will enhance the potential resource gains associated with a difficult task more than the potential resource gains associated with an easy task.

When time pressure is higher, auditors increasingly feel that their resources are threatened (Bakker and Demerouti 2007; Demerouti et al. 2001; Hobfoll et al. 2018). When resources are threatened individuals narrowly focus on resource losses instead of weighing those losses against resource gains when exercising task discretion (Hobfoll 1989; 2001; Hobfoll et al. 2018; Lee and Ashforth 1996). That is, in lower time pressure conditions, auditors likely evaluate both potential resource gains and losses when deciding which task to prioritize. However, in higher time pressure conditions, auditors will narrowly focus on minimizing resource losses. Thus, although psychological ownership enhances the potential resource gains associated with a difficult task to a greater extent than for an easy task (Pierce et al. 2009; Pierce and Jussila 2011), these gains are less likely to materialize in high time pressure conditions because high time pressure induces a narrow focus on resource losses. As a result, psychological ownership may alleviate easy task prioritization in lower time pressure conditions but not in higher time pressure conditions because of the narrow focus on resource losses rather than the trade-off. Combined with the prediction in Hypothesis 2, our theory leads us to predict the following pattern of means.

HYPOTHESIS 3: Easy task prioritization is most prevalent in the conditions when time pressure is higher, lower in the condition where time pressure is lower and psychological ownership is limited, and least prevalent when time pressure is lower and psychological ownership is enhanced.

3. EXPERIMENTAL EVIDENCE

3.1 Study 1: Performance Effects of Task Prioritization using Two Different Tasks

3.1.1 Method

3.1.1.1 Overview and Participants. Study 1 is a 1×2 between-participants experiment in which participants conduct an easy and a difficult audit task. The easy task is an audit of cash

balances and the difficult task is the audit of a goodwill impairment test. We manipulate task order as either easy-difficult or difficult-easy and measure auditors' judgment performance. We recruited 114 professional auditors (eight senior staff auditors, one manager, 102 staff auditors, and three interns) during sessions of a part-time professional accounting education program at a large public university in The Netherlands.² Most auditors are male (71.9 percent), have an average work experience of 15.9 months (*st. dev.* = 12.0 months), and have an average age of 24.3 years (*st. dev.* = 1.7 years). Participants were provided with a computerized case developed using Qualtrics software and participated in the experiment using a link provided during learning sessions.

3.1.1.2 Procedures and Tasks. Participants are informed they have to conduct two audit tasks for two different clients. For one client, participants are asked to audit the cash balances and for the other client participants are asked to audit the client-prepared step-one analysis of a goodwill impairment test. The audit of the goodwill impairment test is arguably more difficult than the audit of the cash balances, not only because the task is intrinsically more difficult but also because of more extensive information provided that auditors need to take into account.

For the audit of the cash balances, participants receive a lead sheet with the balances for (i) cash on hand, (ii) a general bank account, and (iii) a payroll bank account. Participants are tasked to verify the amount using bank confirmations and the count of cash on hand by a senior auditor. Next to that, participants need to perform a cutoff test to verify whether accounting entries are recorded in the correct accounting period. Next to the lead sheet, participants receive: (i) a cash disbursements journal, (ii) bank confirmations for the two bank accounts, (iii) cutoff statements for the two bank accounts, and (iv) the count of cash on hand by the senior auditor.

² More specifically, we recruited participants during classroom sessions of the Post-Master Accountancy program. A Post-Master Accountancy program typically is a two-and-half-year program that auditors follow part-time (usually one day a week in periods outside the busy-season) in The Netherlands to obtain a public accounting license equivalent to CPA.

The task related to the audit of the step one of the goodwill impairment test is adapted from Kadous and Zhou (2019). To shorten the time participants need, we use only two of the five information sources: the 'projections for future revenue' and the 'estimated discount rate'. The participants need to form a preliminary conclusion about the reasonableness of the fair value of the goodwill. To do so, they are asked to review the five-year projections of the revenues. They are informed that the firm's specialist audits the discount rate. Despite that individual information cues are not suggestive that an impairment of goodwill is necessary, the combined evidence suggests that the fair value of the goodwill is too rosy and is overstated. Whereas some of the seeded cues are in the section on revenues, some are also in the section on the discount rate that the firm's specialist would audit. Even though participants are not explicitly asked to audit the discount rate assumption, auditing standards require them to do so (Kadous and Zhou 2019).³ Issues are either surface-level or deep-level, depending on the amount of cognitive processing required to identify them.

3.1.1.3 Dependent Variables. The dependent variables relate to the performance in both tasks. In the audit of the cash balances, we measure how many seeded errors auditors were able to identify. More specifically, the client-prepared numbers do not agree with the bank confirmations and need to be adjusted. Also, two entries relate to the cutoff and are booked in the wrong accounting period. We label indicator variables *Cash on Hand*, *Bank 1*, and *Bank 2* one if auditors correctly identified the amount, and zero otherwise. We label indicator variable *Cutoffs* one if the auditor correctly identified the entries that were booked in the wrong accounting period, and zero otherwise. In the audit of the goodwill impairment test, we use five dependent variables adapted

³ These auditing standards are AU sec. 336 *Using the Work of a Specialist* and International Standards on Auditing (ISA) 620, *Using the Work of an Auditor's Expert*. They require auditors to obtain an understanding of the methods and assumptions used by the specialist.

from Kadous and Zhou (2019): *Reasonableness*, *Surface Issues*, *Deep Issues*, *Total Issues*, and *Contact Directly*. *Reasonableness* indicates auditors' assessment of the overall reasonableness of the fair value, measured on an eleven-point Likert scale, ranging from 0 (*not at all likely to be reasonable*) to 10 (*extremely likely to be reasonable*). *Surface Issues* is the number of surface issues detected (two in total). *Deep Issues* is defined in the same way as *Surface Issues*, but then for the number of deep issues (three in total). *Total Issues* is the sum of *Surface Issues* and *Deep Issues*.⁴ Finally, consistent with Kadous and Zhou (2019), *Contact Directly* is an indicator variable that equals one when auditors indicate the best follow-up action is to call their manager immediately, and zero otherwise.

3.1.1.4 Independent Variable. We manipulate the order of the tasks. That is, we manipulate whether participants conduct the audit of the cash balances first (Easy First) or the audit of the goodwill impairment test first (Difficult First). In our post-experimental questionnaire, we asked how difficult participants perceive the goodwill and the cash task and find that the goodwill task is judged as significantly more difficult than the cash task (4.97 vs. 2.91 on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), $t = -11.66, p < 0.001$).

3.1.2 Results

Panel A of Table 1 shows the descriptive statistics related to the audit of cash balances. We find that the majority of participants is able to obtain the correct amounts for the two bank accounts and the cash on hand. For the cutoff analysis, we find that auditors struggle more. When we compare performance in the audit of cash balances between the Easy First and Difficult First conditions in Panel B of Table 1, we do not find any significant differences for the total number

⁴ Two doctoral students coded the number of issues identified by the auditors. Both were blind to experimental conditions. Cohen's Kappa was 0.82 (0.80) for *Surface Issues* (*Deep Issues*), indicating good interrater agreement. In case that the raters differed on their assessment the average of the two raters was taken.

of correct answers ($p > 0.10$, two-tailed). We do not find significant differences for correctly obtaining the bank numbers ($p > 0.10$, two-tailed), but we do find a significant difference for the cutoffs statement. Specifically, we find that participants in the Difficult First condition are more likely to correctly identify the recordings that were booked in the wrong accounting period than participants in the Easy First conditions (0.48 versus 0.32, $p = 0.08$, two-tailed). Overall, we do not find evidence that performance in the easy task depends on the task order.⁵

Panel C of Table 1 shows the descriptive statistics for the performance in the audit of the client-prepared step one of the goodwill impairment test. We find that, on average, participants identify 0.62 seeded issues (*st. dev.* = 0.72). The score for the reasonableness of the fair value is 5.46 reasonable on a 11-point Likert scale ranging from 0 (*not at all likely*) to 10 (*extremely likely*) with no midpoint label, and 33 percent of participants decides to contact the manager immediately. Panel D of Table 1 presents the results of analyses testing the effect of task ordering on performance. We find that participants in the Easy First condition judge the fair value as more reasonable than participants in the Difficult First condition (5.70 vs. 5.15, $p = 0.07$, two-tailed), identify less total issues (0.52 vs. 0.77, $p = 0.06$, two-tailed), and are less likely to contact the manager immediately (0.26 versus 0.44, $p = 0.04$, two-tailed). When we split the identified issues in surface issues and deep issues (Kadous and Zhou 2019), we find that participants in the Difficult First condition identify significantly more deep issues (0.42 vs. 0.15, $p < 0.01$, two-tailed). We do not find differences across conditions in surface issues identified ($p > 0.10$, two-tailed). Collectively, these results suggest that auditors that conduct the easy task first are less likely to

⁵ We conducted an additional survey study with 54 auditors to provide triangulating evidence related to several assumptions in this study and perceptions about easy task prioritization. We present this survey in Table S1. The survey findings indicate that auditors perceive prioritizing easy tasks as a risk to audit quality, suggesting that starting with a difficult task can better maximize audit quality. Despite these concerns, respondents expect that other auditors are likely to prioritize easier tasks first. Importantly, in the survey we do not have the benefit of randomization and differences may be confounded by other correlated variables than task difficulty, such as risk.

identify the issues in the difficult task for which relatively much cognitive processing is necessary but are equally likely to find the issues for which relatively limited cognitive processing is necessary. Combining the results about performance on the easy and difficult task allows us to conclude that the results of Study 1 are consistent with our expectation that prioritizing of easy tasks decreases overall performance of auditors.⁶

3.2 Study 2: Performance Effects of Auditor Task Prioritization using Two Similar Tasks

The experiment of Study 1 features an easy and a difficult task that are very different in nature. The advantage of this approach is that task performance cannot be confounded by learning effects. That is, auditing the cash balances does not allow the auditor to learn something that helps to perform better in the audit of the goodwill impairment (or the other way around). The disadvantage of this approach is that task-related factors other than task difficulty also differ between the two tasks and those other differences could potentially drive the performance effect documented in Study 1. In the experiment of Study 2, we will feature an easy and difficult task that are very similar in nature. This allows us to keep task-related factors other than difficulty constant but introduces learning effects. Those learning effects should improve performance in the second task and thus make comparing performance on the easy and difficult task separately across conditions less informative. We will thus focus on comparing the combined task performance between the Easy First and Difficult First condition. Finally, featuring an easy and difficult task that are similar allows us to test whether the performance effects documented in Study 1 extend to situations where auditors' tasks are more similar.

⁶ Table S2 in the Supplemental Information reports the mean of each post-experimental questionnaire item across conditions and a test of differences between the two. These results indicate that auditors in the Easy First condition are more likely to indicate that the order was their preferred order than auditors in the Difficult First condition. Table S3 reports the effects of experience and shows that our inferences do not change when controlling for work experience.

3.2.1 Method

3.2.1.1 Overview and Participants. Study 2 is a 1×2 between-participants experiment in which participants conduct an easy and a difficult audit task. Both tasks involve the verification of information produced by the entity (IPE): participants had to verify that the discounted cash flow (DCF) models prepared by the client are mathematically accurate and reliable. The DCF models are very similar. Difficulty between both DCF models is manipulated by varying the number of information cues. We manipulate task order as either easy-first or difficulty-first, as in Study 1.

We recruited 75 professional auditors in the same way as in Study 1. We ensured that participants of Study 2 did not participate in Study 1. 42 out of 75 (56 percent) participants are male, participants are on average 26.43 years old (*st. dev.* = 3.33 years), and have on average 22.97 months of work experience (*st. dev.* = 23.17 months). 61 participants (81.3 percent) work for one of the Big 4 audit firms. Participants were provided a computerized case developed using Qualtrics software, and participated in a classroom session.

3.2.1.2 Procedures and Tasks. The task requires participants to assume the role of an auditor at the year-end audit of a client operating in the agriculture industry. Participants read background information about two fair value estimates. To determine the fair value estimates for the patents, the client uses two DCF models. Participants are informed that the use of a DCF model and the model's input parameters had been audited by the engagement partner.

After reading the background materials, participants enter a training stage in which they receive instructions about DCF models and were able to inspect the two spreadsheets of the DCF models used by the client during a training stage. The order in which the models were presented was counterbalanced between participants. After the training stage, participants were informed that the models are information produced by the entity (IPE), and that they need to verify that the

two DCF models produce accurate and reliable estimates. That is, participants need to check whether both models produce a mathematically sound and computationally correct fair value.

The two fair value estimates have the same forecast length and degree of uncertainty and only differ with respect to the number of information cues each DCF model uses. The number of information cues is indicative of task difficulty (Bonner 2008, p. 160): for the easy (difficult) task the number of information cues in the DCF model was three (seven). This difference in information cues makes verifying the accuracy and reliability of the difficult task more computationally and analytically challenging than the easy task. Moreover, the numbers used in the easy task are easier to compute (e.g., a royalty rate of 10 percent) compared to the difficult task (e.g., royalty rates of 7, 9, or 12 percent), and the information cues in the easy task are correlated (e.g., a 10 percent growth rate and a 10 percent discount rate counterbalance each other), thereby reducing task difficulty (Bonner 2008, p. 160).

Next, depending on the condition, participants conduct either the audit of the easy or difficult DCF model first. Participants get six minutes for each task and each of the tasks contains six seeded errors. During the task execution, participants are asked to verify whether the DCF models produced accurate and reliable fair value estimates based on Excel spreadsheets embedded in the experimental environment. The Excel spreadsheets can be edited by the participants and the formulas used are shown in separate cells. For both fair value estimates, participants have to supply two outputs: participants are asked (i) to identify the cells that contain seeded errors and (ii) to provide the correct fair value estimate given their adjustments of the model. To provide the fair value estimates, participants could use the spreadsheets embedded in the experimental environment to recalculate the fair value estimates. Figure 1 provides an overview of the experimental procedures.

3.2.1.3 Dependent Variables. We use several dependent variables to measure performance. As there were six seeded error in each task, we counted the number of seeded errors identified by the participants. We label these variables *Easy Correct* for the number of errors identified in the easy audit (labeled as Feeder 2000 audit) and *Difficult Correct* for the number of errors identified in the difficult audit (labeled as Robofer audit). We also compute the sum of these and call this variable *Total Correct*. Moreover, we also create two dummy variables that indicate one if the fair value was correct, and zero otherwise. We label these variables *Easy Fair Value* and *Difficult Fair Value* for the Feeder 2000 and Robofer audit, respectively.

3.2.1.4 Independent Variable. We manipulate the order of the tasks. That is, we manipulate whether participants conduct the audit of the easy discounted cash flow model (Easy First) or the audit of the difficult discounted cash flow model first (Difficult First). In our post-experimental questionnaire, we ask participants how difficult they perceive both tasks to be. We find that participants classify the Robofer audit indeed as significantly more difficult than the Feeder 2000 audit (3.48 vs. 3.13., $t = -2.13$, $p = 0.0365$, two-tailed).

3.2.2 Results

The descriptive statistics of our dependent variables are reported in Panel A of Table 2. We find that participants, on average, correctly identified 3.93 (3.33) errors for the easy (difficult) task, and identify 7.27 errors in total. We find that 21.33 (9.33) percent of the participants correctly assess the fair value for the easy (difficult) DCF model.⁷ Examining the differences between conditions in Panel B of Table 2, we find that participants in the Difficult First condition perform significantly better when considering both tasks together (7.83 vs. 6.74, $t = 1.85$, $p = 0.068$, two-tailed). This

⁷ We find that the difference between the number of errors identified in the easy and difficult task is significantly different ($t = 2.40$, $p = 0.019$, two-tailed). We also find that the proportion of participants correctly assessing the fair value in the easy task is significantly higher than in the difficult task ($z = -2.04$, $p = 0.041$, two-tailed).

result is consistent with easy task prioritization impairing overall performance of auditors. Considering performance in both tasks separately, we find that participants in the Difficult First condition perform significantly better in the easy task (4.44 vs. 3.46, $t = 2.66$, $p = 0.010$, two-tailed) and were more likely to accurately assess the fair value of easy task (0.31 vs. 0.13, $z = 1.87$, $p = 0.061$). We do not find any statistically significant differences for the number of errors identified and accurately assessing the fair value for the difficult task ($p > 0.10$, two-tailed).⁸ As mentioned earlier, comparing performance on the easy and difficult task separately across conditions is potentially confounded by learning effects and thus less informative.

Overall, Study 1 and Study 2 provide converging evidence that prioritizing of easy tasks reduces overall performance of auditors. In Study 3, we will examine whether engage in easy task prioritization when they have task discretion.

3.3 Study 3: Auditor Task Prioritization and the Effects of Time Pressure and Psychological Ownership

3.3.1 Method

3.3.1.1 Overview and Participants. Study 3 is a 2×2 between-participants experiment in which auditors were asked to conduct the same two audit tasks as in Study 2. Before they could start working on the tasks, participants had to choose which task they wanted to start with. We manipulate psychological ownership (enhanced or limited) and time pressure (higher or lower) between participants.

We recruited 177 professional staff auditors in the same way as in Study 1 and Study 2. Most auditors were male (63.8 percent), worked for Big-4 accounting firms (72.9 percent), had an

⁸ Table S4 in the Supplemental Information reports the mean of each post-experimental questionnaire item of Study 2 across conditions and a test of differences between the two. These results indicate that auditors in the Easy First condition are more likely to indicate that the order was their preferred order than auditors in the Difficult First condition.

average work experience of 12.8 months (*st. dev.* = 7.8 months), and had an average age of 24.4 years (*st. dev.* = 1.9 years). Participants were provided with a computerized case developed using oTree software (Chen et al. 2016), and participated in the experiment using a link either provided during a classroom session or sent as an e-mail invitation (if participants were not present during the classroom session). Auditors were informed that the experiment would take approximately 30 minutes, and received a fixed payment of ten euros (\approx \$11.30) for their participation.

3.3.1.2 Procedures and Tasks. The tasks are similar to those in Study 2, except that in Study 2 participants had no choice in which order to conduct the tasks. After reading the background information and going through the training stage, participants are asked to judge which DCF model they consider more difficult on a slider ranging from -100 to 100 where the endpoints of the slider both indicate one of the two tasks. Subsequently, participants choose which task they would like to prioritize. We manipulated time pressure and psychological ownership before participants need to judge task difficulty and decide which task they want to prioritize. Participants are also informed that once they finish the first task and move on to the second task they cannot go back. A post-experimental questionnaire included manipulation checks, questions about the process and participants' personalities and demographics. Figure 1 provides an overview of the experimental procedures.

3.3.1.3 Dependent Variable. Our dependent variable, *Easy Task Prioritization*, measures whether auditors prioritize the easy task and equals one when a participant chooses to start with the easy task and zero when a participant chooses to start with the difficult task. Participants were asked to choose which audit task they wanted to start with and had been able to observe these DCF models during the training stage. Once they had selected a task to start with, they could only move to the next task by submitting the first task. If the first task was submitted, they could not go back.

3.3.1.4 Independent Variables. We manipulate psychological ownership as either enhanced or limited in two complementary ways. First, we manipulate participants' control over their work. Prior literature describes control over the target as the most salient predictor of ownership feelings (Furby 1978). We operationalized having control over one's work by varying whether a participant was given the opportunity to document the problem in their own words. More specifically, participants were asked to document why, after reading the background information and going through the training stage, a fair value estimate had to be used for the client's patents. In the enhanced psychological ownership condition, we informed participants that the team leader gives them full control over how to document this. In the limited psychological ownership condition, we informed participants that they had to fully and literally copy the documentation provided by the team leader. This manipulation is similar to psychological ownership manipulations used in prior literature (Baer and Brown 2012; Bauer et al. 2023). Importantly, to alleviate the concern that documentation is more difficult for participants in the enhanced psychological ownership condition, we provided to all conditions a summary of the background information. It is also important to note that the documentation was not subject to the time limit and participants had the same amount of time available to audit the DCF models, irrespective of the psychological ownership condition they are in. Second, to ensure consistency with the control manipulation, we adapted different aspects of the case that relate to having control over the target to either high or low control. As psychological ownership is a multifaceted construct that is created by a consistent set of beliefs and practices, adapting the text to the control manipulation ensures higher construct validity. The parts of the case text that vary between the psychological ownership conditions are listed in Table 3.

We manipulate *Time Pressure* as either higher or lower. Participants in the lower time pressure conditions had twelve minutes to complete both tasks, which is similar as in Study 2.

Participants in the higher time pressure conditions only had eight minutes. In the training stage, participants in the lower (higher) time pressure condition had five (three) minutes.⁹ To test for a causal effect of time pressure on task choice, it is important that participants correctly estimate that time pressure during the task execution will be higher or lower before they decide which task they want to prioritize. If participants only experience higher or lower time pressure during the task execution, which is after we derive our dependent variable, any variation in *Easy Task Prioritization* cannot be attributed to our manipulation of time pressure. Hence, we took three steps to ensure that participants before or at the moment of task choice experience higher or lower time pressure. First, we varied the time limit in the training stage. Second, a countdown timer was displayed saliently during the training phase and during the tasks for the higher time pressure condition. Third, we stated in the lower time pressure condition that “twelve minutes should be enough to conduct both tasks.”¹⁰

We also tested whether participants perceived the difficult task to be more difficult than the easy task in two ways. First, just before participants made the decision which task to prioritize, they were asked to evaluate on a slider ranging from “-100” to “100” which task they judged *ex-ante* to be more difficult based on the training stage and the information they received about the tasks. We find that participants judge the Robofer audit (i.e., the task with more information cues) as significantly more difficult ($M = 51.86$, $t = 15.76$, $p < 0.01$, two-tailed for a comparison with

⁹ Participants in the lower and higher time pressure conditions do not spend a significantly different amount of time on the training stage, even though participants in the lower time pressure condition had two minutes longer ($t = 0.20$, $p > 0.10$, two-tailed). Hence, based on the actual time spent it seems unlikely that the time pressure manipulation may have caused participants in the lower time pressure condition to have more task experience than the participants in the higher time pressure condition. We also do not find evidence that the number of seconds spent in the training stage is associated with *Easy Task Prioritization* ($z = -0.45$, $p > 0.10$, two-tailed for a univariate logistic regression).

¹⁰ Our manipulation checks for time pressure, psychological ownership, and the difficulty between the two tasks indicate successful manipulation and are described in detail in the section related to Study 3 in the Supplemental Information.

the midpoint of the scale). Second, in the post-experimental questionnaire, we asked participants to evaluate the statements: “The Robofer audit was difficult” and “The Feeder 2000 audit was difficult” on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A simple *t*-test shows that participants evaluated the Robofer audit (i.e., the difficult task) as significantly more difficult than the Feeder 2000 audit (i.e., the easy task) (3.72 vs. 3.39, $t = 2.92$, $p < 0.01$, two-tailed).

3.3.2 Results

We start by analyzing whether auditors prioritize easy over difficult tasks in a pooled sample. If difficulty played no role in the prioritizing of tasks, we would expect 50 percent of participants to choose the easy task and 50 percent to choose the difficult task. However, if participants behave in a way that is consistent with our hypothesis, we expect more than 50 percent to prioritize the easy task. Table 4 shows that, out of the 177 participants, 123 (69.49 percent) prioritized the easy task over the difficult task. A simple binomial test shows that the number of participants prioritizing the easy task is significantly higher than our benchmark of 50 percent ($p < 0.01$, two-tailed). This result supports our hypothesis that auditors tend to prioritize easy tasks over difficult tasks when they have discretion over task ordering (i.e., Hypothesis 1).

Next, we consider the effects of time pressure and psychological ownership on auditors’ prioritization of easy tasks. Hypothesis 2 predicts that auditors are more likely to prioritize easy tasks when time pressure is higher. Hypothesis 3 predicts that easy task prioritization is strongest in the higher time pressure conditions, followed by the lower time pressure conditions with limited psychological ownership, and least easy task prioritization occurs in the lower time pressure conditions with enhanced psychological ownership. We graph mean proportions of easy task prioritization by experimental condition in Figure 2. The visual fit of the observed pattern of means

matches the predicted pattern. Table 4 shows the proportion of auditors who prioritized the easy task, both collapsed across conditions and separately for each condition.

We provide formal tests of significance in Table 5. The ANOVA model, as reported in Panel A of Table 5, shows a statistically significant main effect for time pressure ($p = 0.053$, two-tailed). This result is consistent with Hypothesis 2 and indicates that easy task prioritization is significantly higher (lower) when time pressure is higher (lower).

Our theoretical predictions define a specific expected pattern of task prioritization across the four experimental conditions. To test this, we use a linear custom contrast of cell means (Buckless and Ravenscroft 1990, Guggenmos et al. 2018). We use contrast weights that match our theoretical predictions. That is, "-5" for the 'enhanced psychological ownership – lower time pressure', "-1" for the 'limited psychological ownership – lower time pressure' condition, and "+3" for the two higher time pressure conditions. Consistent with the approach suggested in Guggenmos et al. (2018), we triangulate three pieces of complementary evidence to provide a comprehensive picture of the contrast results.

First, we investigate whether the visual fit of the observed data matches with the predicted pattern. Figure 2 displays the observed interaction plot for the proportion of auditors that prioritized the easy task. Consistent with our theoretical predictions, the visual evaluation shows that easy task prioritization is lowest in the 'enhanced psychological ownership – lower time pressure condition', followed by the 'limited psychological ownership – lower time pressure condition', and the two higher time pressure conditions have the highest easy task prioritization.

Second, we provide tests of significance. Panel A of Table 5 provides a traditional ANOVA model where we do not find a significant interaction effect ($p = 0.344$, two-tailed). Analyses of simple effects for psychological ownership conditional on the time pressure condition are provided in Panel C of Table B. In our simple effects, we find evidence suggesting that psychological

ownership reduces the prioritization of easy tasks in the lower time pressure condition based on a one-tailed t -test (difference in proportion of easy task prioritization: 0.70 vs. 0.54, $t = 1.48$, $p = 0.071$, one-tailed). This is in line with our predictions that psychological ownership is only effective in attenuating easy task prioritization when time pressure is lower. The hypothesis test of the [-5, -1, +3, +3] contrast weights is statistically significant ($F = 4.29$, $p = 0.040$, two-tailed).

Third, consistent with the approach in Guggenmos et al. (2018), we test the contrast variance residual of our [-5, -1, +3, +3] contrast test. We start with the semi-omnibus F-test, where we find a non-significant F-value for the residual between-cells variance test ($F = 1.04$, $p = 0.356$, two-tailed). Additionally, aligned with the q^2 -measure proposed by Guggenmos et al. (2018), we find that the contrast variance residual $q^2 = 0.081$, indicating that the contrasts explain the major part of the variance, and only a small part of the between-cells variance is left unexplained by the contrasts. Overall, our results provide support for our first and second hypothesis.¹¹ That is, we find that auditors tend to prioritize easy tasks over difficult tasks and that easy task prioritization is exacerbated under higher time pressure. Furthermore, we find some support for our predicted pattern of means.¹²

4. DISCUSSION

We first investigate whether easy task prioritization impairs auditors' judgment performance and find that it negatively influences performance in two experimental settings. Given these performance implications, we conduct a third experimental study documenting that auditors

¹¹ As easy task prioritization may potentially be impacted by participants' prior work experience, experience with fair value estimates, and experience with discounted cash flow analyses. we test whether these variables are correlated with easy task prioritization and whether including them as covariate would change our inferences. We find that none of the variables is significantly univariately correlated with easy task prioritization (all $p > 0.10$, two-tailed).

¹² We report performance effects measured in Study 3 in Table S5. We find that participants in the Lower Time Pressure condition perform significantly better than in the Higher Time Pressure condition ($p < 0.01$, two-tailed). In Table S6 and Figure S3 we report the time spent on each of the tasks across conditions.

exhibit easy task prioritization and that easy task prioritization is exacerbated under higher time pressure. Consistent with our theoretical predictions based on Conservation of Resources theory, we find that easy task prioritization is most prevalent in higher time pressure conditions, less prevalent in lower time pressure conditions with limited psychological ownership, and least prevalent in lower time pressure conditions with enhanced psychological ownership.

Our study contributes to several streams of literature. First, by showing easy task prioritization in an auditing setting and documenting negative performance effects, we contribute to the nascent but growing literature on easy task prioritization (e.g., Arshad et al. 2022; Ibañez et al. 2018). Second, we contribute to the already voluminous literature on time pressure in auditing by examining the effects of time pressure and psychological ownership in auditing. While previous research indicates an inverted-U relationship between time pressure and judgment performance, our evidence is consistent with COR theory predicting that auditors operating under higher time pressure focus more on minimizing resource losses rather than balancing gains and losses. This suggests that interventions to improve resource gains may not be effective when time pressure is high. Third, we deepen our knowledge about the role of psychological ownership in auditing. Despite its documented positive outcomes, we find that advantages of increased psychological ownership are less likely to materialize when time pressure is high. This adds to the emerging literature on psychological ownership, as the interaction between psychological ownership and time pressure has to the best of our knowledge hitherto not been explored.

This study should be interpreted in light of its limitations. First, auditing is a social phenomenon and auditors' decisions are a function of their environment (i.e., the client, the audit team, the audit organization). This experiment focuses on the individual behavior of the auditor and largely ignores environmental variables. Second, there are no direct adverse consequences when auditors do not meet the time pressure requirements in the experiment. In reality, there may

be such consequences and they may cause auditors to make different decisions in task prioritization. Third, to ensure a clean test of our theory, we have to make some simplifications in our experiments that may be unrealistic in practice. For instance, it is unlikely that the same auditor conducts both the audit of the goodwill impairment test and the cash balances during the same audit engagement. As another example, auditors in our third study cannot go back to the first task once they have started the second task. Finally, with respect to our first hypothesis that auditors tend to prioritize easy tasks, there may be alternative theories or psychological phenomena that may explain easy task prioritization, such as a desire for practice or a desire for closure. In particular, as we are unable to measure auditors' resources directly, we cannot rule out alternative theories.

Future research can further address easy task prioritization in auditing. For instance, research can investigate interventions that alleviate easy task prioritization when time pressure is high. Moreover, not much is known about how feelings of psychological ownership develop within audit firms. Future research could investigate this development and examine specific practical interventions that can enhance psychological ownership in audit firms. Finally, future research could investigate the effect of other task characteristics on task prioritization. For instance, prior experience with tasks or whether auditors can conduct tasks on their own or likely need help from others can affect task prioritization.

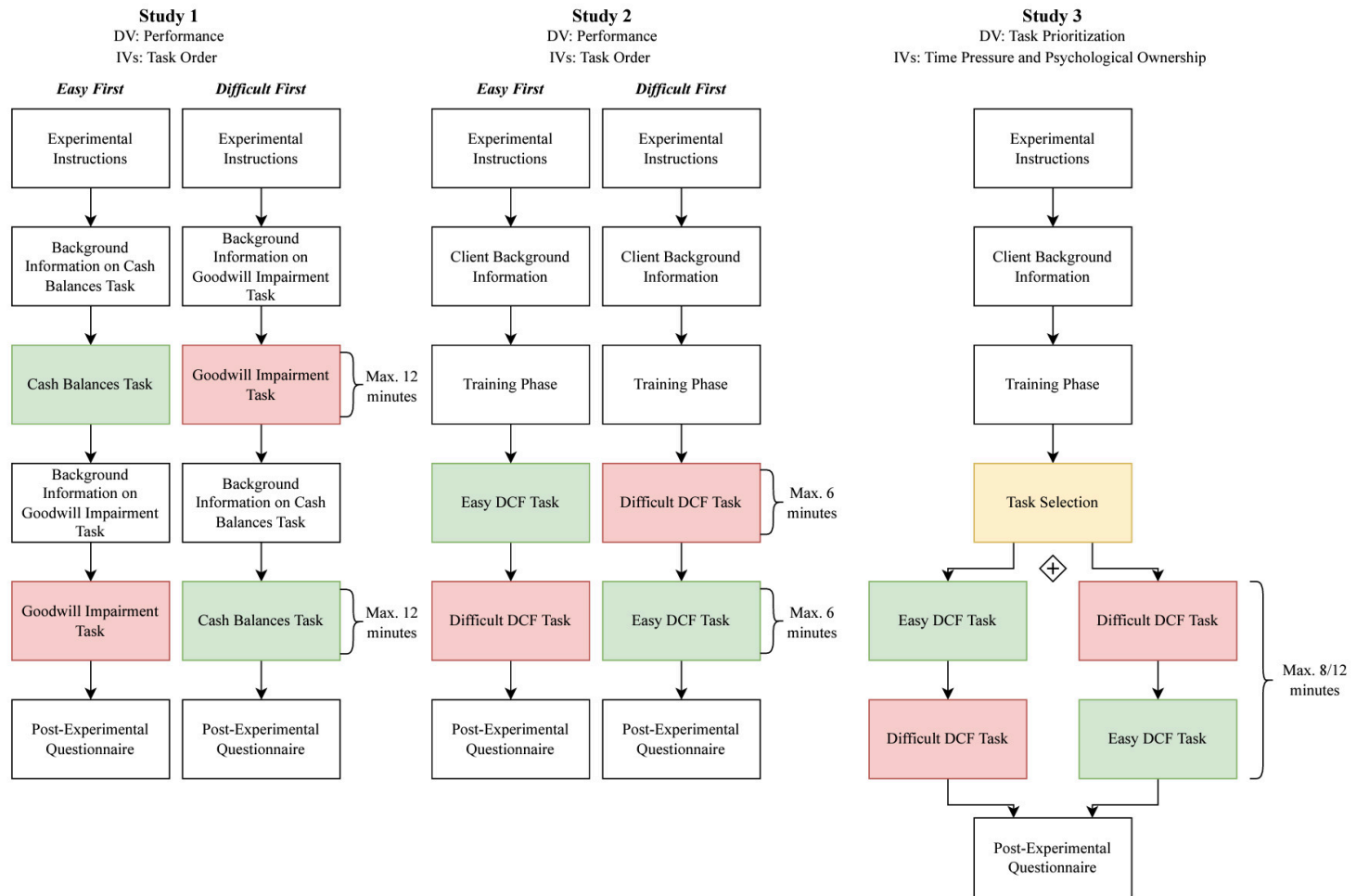
REFERENCES

- American Institute of Certified Public Accountants (AICPA). 2012. AU-C Section 300: *Planning an Audit*. New York, NY: AICPA.
- Arshad, F., Dierynck, B., & Ibanez, M. 2022. Managing discretion: How real-time feedback influences workers' easy task selection. *Available at SSRN 4299058*.
- Baer, M., & Brown, G. 2012. Blind in one eye: How Psychological Ownership of Ideas Affects the Types of Suggestions People Adopt. *Organizational Behavior and Human Decision Processes*, 118(1), 60-71.
- Bakker, A. B., & Demerouti, E. 2007. The Job Demands-Resources Model: State of the Art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bauer, T., Estep, C., & Griffith, E. E. 2022. Improving Specialists' Contributions to Audits. *Available at SSRN 2798346*.
- Bonner, S. E. 1994. A model of the effects of audit task complexity. *Accounting, Organizations and Society*, 19(3), 213-234.
- Bonner, S. E. 2008. *Judgment and Decision Making in Accounting*. Prentice Hall.
- Bowrin, A. R., & King, J. 2010. Time pressure, task complexity, and audit effectiveness. *Managerial Auditing Journal*, 25(2), 160-181.
- Brown, G., Crossley, C., & Robinson, S. L. 2014. Psychological ownership, territorial behavior, and being perceived as a team contributor: The critical role of trust in the work environment. *Personnel Psychology*, 67(2), 463-485.
- Buckless, F. A., & Ravenscroft, S. P. 1990. Contrast coding: A refinement of ANOVA in behavioral analysis. *The Accounting Review*, 65(4) 933-945.
- Chen, D. L., Schonger, M., & Wickens, C. 2016. oTree—An open-source platform for laboratory, online, and field experiments. *Journal of Behavioral and Experimental Finance*, 9, 88-97.
- Chen, S., Westman, M., & Eden, D. 2009. Impact of enhanced resources on anticipatory stress and adjustment to new information technology: a field-experimental test of conservation of resources theory. *Journal of Occupational Health Psychology*, 14(3), 219-230.
- Dawkins, S., Tian, A. W., Newman, A., & Martin, A. 2017. Psychological ownership: A review and research agenda. *Journal of Organizational Behavior*, 38(2), 163-183.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. 2001. The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- DeZoort, F. T., & Lord, A. T. 1997. A review and synthesis of pressure effects research in accounting. *Journal of Accounting Literature*, 16, 28-85.
- Furby, L. 1978. Possession in humans: An exploratory study of its meaning and motivation. *Social Behavior and Personality: an International Journal*, 6(1), 49-65.
- Glover, S. M. 1997. The influence of time pressure and accountability on auditors' processing of nondiagnostic information. *Journal of Accounting Research* 35(2): 213–226
- Halbesleben, J. R. 2010. A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. *Work Engagement: A Handbook of Essential Theory and Research*, 8(1), 102-117.

- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. 2014. Getting to the “COR”: Understanding the Role of Resources in Conservation of Resources Theory. *Journal of Management*, 40(5), 1334-1364.
- Hobfoll, S. E. 1989. Conservation of Resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.
- Hobfoll, S. E. 2001. The influence of culture, community, and the nested self in the stress process: Advancing Conservation of Resources theory. *Applied Psychology*, 50(3), 337-421.
- Hobfoll, S. E. 2011. Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84(1), 116-122.
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. 2018. Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103-128.
- Holmstrom, K. M. 2023. The effect of opaque audit methods and auditor ownership on reliance on independent expectations. *Available at SSRN 3596478*.
- Hurley, P. J. 2015. Ego depletion: Applications and implications for auditing research. *Journal of Accounting Literature*, 35, 47-76.
- Hurley, P. J. 2019. Ego depletion and auditors’ JDM quality. *Accounting, Organizations and Society*, 77, 101048.
- Hyatt, T. A., & Taylor, M. H. 2013. The effects of time budget pressure and intentionality on audit supervisors' response to audit staff false sign-off. *International Journal of Auditing*, 17(1), 38-53.
- Ibañez, M. R., Clark, J. R., Huckman, R. S., & Staats, B. R. 2018. Discretionary task ordering: Queue management in radiological services. *Management Science*, 64(9), 4389-4407.
- Kadous, K., & Zhou, Y. 2019. How does intrinsic motivation improve auditor judgment in complex audit tasks?. *Contemporary Accounting Research*, 36(1), 108-131.
- Kahneman, D. 1973. *Attention and effort*. Englewood Cliffs, NJ: Prentice-Hall.
- Lambert, T. A., K. L. Jones, J. F. Brazel, and D. S. Showalter. 2017. Audit time pressure and earnings quality: An examination of accelerated filings. *Accounting, Organizations and Society* 58: 50–66.
- Lee, R. T., & Ashforth, B. E. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.
- López, D. M., & Peters, G. F. 2012. The effect of workload compression on audit quality. *Auditing: A Journal of Practice and Theory*, 31(4), 139-165.
- MacKenzie, N. L. 2019. The Power of Psychological Ownership: How Managers’ “Sense of Possession” and Auditor’s Conversation Starters Influence Managers’ Disclosure Judgments. *Working paper*.
- Mocadlo, R. P. 2022. How Do Auditors Order Their Tasks, and How Does Task Ordering Affect Performance Under Time Pressure?. *Behavioral Research in Accounting*, 34(1), 93-111.
- Morrill, J. B., Morrill, C. K., & Kopp, L. S. 2012. Internal control assessment and interference effects. *Behavioral Research in Accounting*, 24(1), 73-90.

- Mullis, C. E., & Hatfield, R. C. 2018. The effects of multitasking on auditors' judgment quality. *Contemporary Accounting Research*, 35(1), 314-333.
- Peecher, M. E., & Solomon, I. 2001. Theory and experimentation in studies of audit judgments and decisions: Avoiding common research traps. *International Journal of Auditing*, 5(3), 193-203.
- Persellin, J. S., J. J. Schmidt, S. D. Vandervelde, and M. S. Wilkins. 2019. Auditor perceptions of audit workloads, audit quality, and job satisfaction. *Accounting Horizons* 33(4): 95–117.
- Pierce, J. L., & Jussila, I. 2011. *Psychological Ownership and the Organizational Context: Theory, Research Evidence, and Application*. Cheltenham, U.K.: Edward Elgar Publishing.
- Pierce, J. L., Jussila, I., & Cummings, A. 2009. Psychological ownership within the job design context: Revision of the job characteristics model. *Journal of Organizational Behavior*, 30(4), 477-496.
- Pierce, J. L., Kostova, T., & Dirks, K. T. 2001. Toward a theory of psychological ownership in organizations. *Academy of Management Review*, 26(2), 298-310.
- Pierce, J. L., Kostova, T., & Dirks, K. T. 2003. The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7(1), 84-107.
- Pietsch, C. P., & Messier Jr, W. F. 2017. The effects of time pressure on belief revision in accounting: A review of relevant literature within a pressure-arousal-effort-performance framework. *Behavioral Research in Accounting*, 29(2), 51-71.
- Porteous, J. D. 1976. Home: The territorial core. *Geographical Review*, 66, 383–390
- Rubino, C., Perry, S. J., Milam, A. C., Spitzmueller, C., & Zapf, D. 2012. Demand–control–person: Integrating the demand–control and conservation of resources models to test an expanded stressor–strain model. *Journal of Occupational Health Psychology*, 17(4), 456-472.
- Solomon, I., and C. E. Brown. 1992. Auditors' judgments and decisions under time pressure: An illustration and agenda for research. In *Auditing Symposium XI*, edited by R. P. Srivastava, 73–91. Lawrence, KS: The University of Kansas.
- Sun, L. Y., & Pan, W. (2008). HR practices perceptions, emotional exhaustion, and work outcomes: A conservation-of-resources theory in the Chinese context. *Human Resource Development Quarterly*, 19(1), 55-74.
- Van Dyne, L., & Pierce, J. L. 2004. Psychological Ownership and Feelings of Possession: Three Field Studies Predicting Employee Attitudes and Organizational Citizenship Behavior. *Journal of Organizational Behavior*, 25(4), 439-459.
- Wang, L., Law, K. S., Zhang, M. J., Li, Y. N., & Liang, Y. 2019. It's mine! Psychological ownership of one's job explains positive and negative workplace outcomes of job engagement. *Journal of Applied Psychology*, 94(2), 277-297.
- White, R. W. 1959. Motivation Reconsidered: The Concept of Competence. *Psychological Review*, 66(5), 297-333.
- Zhang, Y., Liu, G., Zhang, L., Xu, S., & Cheung, M. W. L. 2021. Psychological ownership: A meta-analysis and comparison of multiple forms of attachment in the workplace. *Journal of Management*, 47(3), 745-770.

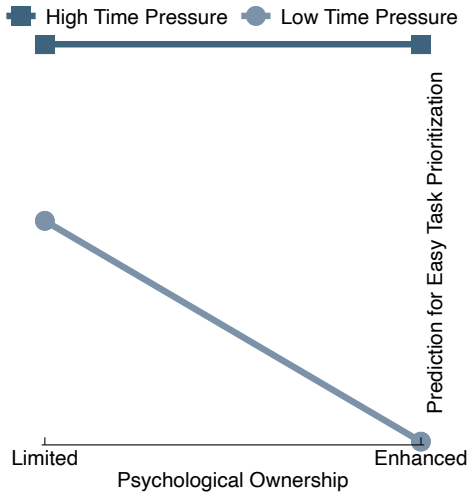
FIGURE 1
Overview of Studies



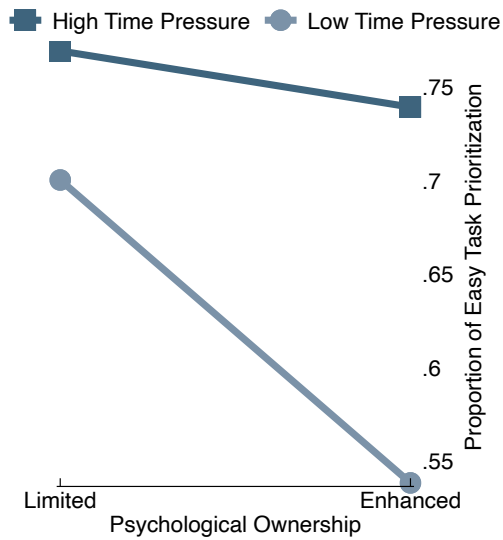
Note: Figure 1 presents an overview of studies with the instrument flows. At the *Task Selection* stage (in yellow), participants choose whether to prioritize the easy task or the difficult task. Participants need to conduct both the easy and difficult task within a specified time limit, namely eight (twelve) minutes in the higher (lower) time pressure condition.

FIGURE 2
Pattern of Means for Easy Task Prioritization

Panel A: Predicted Pattern of Means [3, 3, -1, -5]



Panel B: Observed Pattern of Means



Note: Figure 2 presents the predicted pattern of means (Panel A) and the observed pattern of means (Panel B) for *Easy Task Prioritization*, by experimental condition. *Easy Task Prioritization* equals one if participants prioritized the easy task, and zero if participants prioritized the difficult task.

TABLE 1
Study 1: Performance Effects of Task Prioritization

Panel A: Descriptive Statistics Cash: Mean (Standard Deviation)

Condition	N	Cash on Hand	Bank 1	Bank 2	Cutoffs	Total
Easy First	66	0.95 (0.21)	0.92 (0.27)	0.88 (0.33)	0.32 (0.47)	3.08 (0.85)
Difficult First	48	0.94 (0.24)	0.96 (0.20)	0.79 (0.41)	0.48 (0.50)	3.17 (0.88)
Combined	114	0.95 (0.22)	0.94 (0.24)	0.84 (0.37)	0.39 (0.49)	3.11 (0.86)

Panel B: Test for Difference between Conditions: *t*-stat or *z*-stat (*p*-value)

Variable	Cash on Hand	Bank 1	Bank 2	Cutoffs	Total
Difficult First	-0.40 (0.690)	0.74 (0.458)	-1.26 (0.211)	1.75* (0.083)	0.56 (0.579)
<i>N</i>	114	114	114	114	114

Panel C: Descriptive Statistics: Mean (Standard Deviation)

Condition	N	Reason- ableness	Surface issues	Deep issues	Total issues	Contact immediately
Easy First	66	5.70 (1.52)	0.36 (0.57)	0.15 (0.36)	0.52 (0.64)	0.26 (0.44)
Difficult First	48	5.15 (1.61)	0.35 (0.60)	0.42 (0.61)	0.77 (0.81)	0.44 (0.50)
Combined	114	5.46 (1.58)	0.36 (0.58)	0.26 (0.50)	0.62 (0.72)	0.33 (0.47)

Panel D: Test for Difference between Conditions: *t*-stat or *z*-stat (*p*-value)

Variable	Reason- ableness	Surface issues	Deep issues	Total issues	Contact immediately
Difficult First	-1.81* (0.073)	-0.09 (0.932)	2.89*** (0.005)	1.89* (0.061)	2.03** (0.045)
<i>N</i>	114	114	114	114	114

Note: ***, **, and * indicate significance levels at the 1%, 5%, and 10% level, respectively. All significance levels reported are two-tailed. The dependent variables are defined in the *Methods* section of Study 1. The independent variable is the task order. Easy First (Difficult First) refers to the group of participants that conducts the audit of cash balances (the goodwill impairment test) first and the audit of the goodwill impairment test (cash balances) second.

TABLE 2
Study 2: Performance Effects of Task Prioritization

Panel A: Descriptive Statistics: Mean (Standard Deviation)

Condition	N	Easy Correct	Difficult Correct	Total Correct	Easy Fair Value	Difficult Fair Value
Easy First	39	3.46 (0.27)	3.28 (0.29)	6.74 (0.39)	0.13 (0.05)	0.05 (0.04)
Difficult First	36	4.44 (0.25)	3.38 (0.27)	7.83 (0.45)	0.31 (0.08)	0.14 (0.06)
Combined	75	3.93 (0.19)	3.33 (0.20)	7.27 (0.30)	0.21 (0.41)	0.09 (0.29)

Panel B: Test for Difference between Conditions: *t*-stat or *z*-stat (p-value)

Variable	Easy Correct	Difficult Correct	Total Correct	Easy Fair Value	Difficult Fair Value
Difficult First	2.66*** (0.010)	0.27 (0.789)	1.85* (0.068)	1.87* (0.061)	1.30 (0.193)
<i>N</i>	75	75	75	75	75

Note: ***, **, and * indicate significance levels at the 1%, 5%, and 10% level, respectively. All significance levels reported are two-tailed. The dependent variables are defined in the *Methods* section of Study 2. For *Easy Correct*, *Difficult Correct*, and *Total Correct* a *t*-test is used and for *Easy Fair Value* and *Difficult Fair Value* a test of proportions. The independent variable is the task order. Easy First (Difficult First) refers to the group of participants that conducts the easy (difficult) discounted cash flow model first and the difficult (easy) discounted cash flow model second.

TABLE 3
Study 3: Psychological Ownership Manipulation
(differences between treatments in *italics*)

Limited Psychological Ownership	Enhanced Psychological Ownership
<p>You work in an audit team where your control over the audit tasks is seen as <i>totally unimportant</i>. At the end of audit engagements in this team, your contribution <i>does not feel</i> as your work.</p> <p>During evaluations of audit engagements with this team leader, <i>no</i> attention is paid to the extent to which you have control over the tasks.</p> <p>In this audit team, you had <i>no</i> control over the way in which you conducted the previous audit tasks. Therefore, you <i>cannot</i> use the insights from the previous tasks in deciding how to conduct future audit tasks.</p> <p>These tasks are regarded by the audit team as <i>a part of</i> the audit engagement.</p> <p>The audit team leader <i>has prepared a documentation and asks you to fully and literally copy his documentation</i>.</p> <p><i>The Audit Tasks</i></p>	<p>You work in an audit team where your control over the audit tasks is seen as <i>important</i>. At the end of audit engagements in this team, your contribution <i>truly feels</i> as your work.</p> <p>During evaluations of audit engagements with this team leader, <i>a lot of</i> attention is paid to the extent to which you have control over the tasks.</p> <p>In this audit team, you had <i>a lot of</i> control over the way in which you conducted the previous audit tasks. Therefore, you <i>can</i> use the insights from the previous tasks in deciding how to conduct future audit tasks.</p> <p>These tasks are regarded by the audit team as <i>your contribution to</i> the audit engagement.</p> <p>The audit team leader <i>grants you all control and freedom over how you document this</i>.</p> <p><i>[Participant's Name]'s Audit Tasks</i></p>

TABLE 4
Study 3: Proportion (Percentage) of Auditors Prioritizing the Easy Task by Condition

	Psychological Ownership		
	Limited	Enhanced	Collapsed
Lower Time Pressure	28/40 (70.0)	21/39 (53.8)	49/79 (62.0)
Higher Time Pressure	40/52 (76.9)	34/46 (73.9)	74/98 (75.5)
Collapsed across Time Pressure	68/92 (73.9)	55/85 (64.7)	123/177 (69.4)

Note: Table 3 presents the number of participants per condition that prioritize the easy task as a proportion of the number of participants in that condition. The dependent variable *Easy Task Prioritization* equals one if participants prioritized the easy task, and zero if participants prioritized the difficult task.

TABLE 5
Study 3: Inferential Statistics Regarding Auditor Task Prioritization

Panel A: Analysis of Variance

Source	df	<i>F</i>	Two-sided p-value
Psychological Ownership	1	1.92	0.168
Time Pressure	1	3.80	0.053 *
Psychological Ownership × Time Pressure	1	0.90	0.344

Panel B: Planned Contrasts

Hypothesized Contrast	df	<i>F</i>	Two-sided p-value
Main effect for time pressure and interaction effect for time pressure and psychological ownership (contrast weights are -5, -1, +3, +3)	1	4.29	0.040 **
Residual Between-Cells Variance	2	1.04	0.357

Panel C: Simple Effects

Simple Effects	df	<i>F</i>	Two-sided p-value
Psychological Ownership <i>if</i> Time Pressure is Lower Condition	1	2.19	0.142
Psychological Ownership <i>if</i> Time Pressure is Higher Condition	1	0.12	0.737

Note: ***, **, and * indicate significance levels at the 1%, 5%, and 10% level, respectively. All significance levels are two-tailed. The contrast variance residual $q^2 = 0.081$, indicating that the contrasts explain the major part of the variance.

Online Appendix to "Auditor Task Prioritization: The Effect of Time Pressure and Psychological Ownership"

FIGURES:

Study 2

Figure S1: Screenshots of DCF Models in Study 2

Study 3

Figure S2: Screenshots of DCF Models in Study 3

Figure S3: Proportion of Time Spent on Both Tasks Conditional on First Task Chosen

TABLES:

Study 1

Table S1: Survey of Auditors

Table S2: Responses to Post-Experimental Questionnaire Items Across Conditions

Table S3: Experience Effects

Study 2

Table S4: Responses to Post-Experimental Questionnaire Items Across Conditions

Study 3

Table S5: Inferential Statistics Regarding Seeded Errors Identified

Table S6: Proportion of Time Spent on Easy Task by Condition.

Table S7: Logistic Regression of *Easy Task Prioritization* on *Accountability*

Study 1 - Additional Analyses and Robustness Tests

Table S1 - Survey of Auditors

We conducted a survey to triangulate the findings from our experiments and to gather additional insights into auditors' task prioritization behaviors. The survey findings show that auditors perceive easy task prioritization to be a risk for audit quality and that an auditor can better start with a difficult task in order to maximize audit quality. Despite the audit quality concerns of easy task prioritization, our respondents expect other auditors to prioritize easy tasks. Below we report the method and the results of our survey. It is important to read these results with caution. The survey has several limitations that must be acknowledged. Firstly, risk levels associated with the tasks, as well as other task-related factors, may have influenced auditors' responses. That is, higher risk tasks could prompt a preference for prioritizing to ensure thorough completion, overshadowing the intended focus on task difficulty. Secondly, the lack of open-ended questions limited the understanding of auditors' rationale behind their choices, making it difficult to disentangle the specific reasons for their task prioritization preferences. Additionally, the omission of correlated variables such as perceived task risk and resource availability could impact the robustness of the findings.

Method

For our survey, we recruited 54 professional auditors via training sessions at a Big 4 audit firm in The Netherlands. The sample consists of one intern, 17 staff auditors, 35 senior staff auditors, and one manager. Survey participants are on average 25.54 years old (st. dev. = 3.44) and have, on average, 2.69 years of work experience (st. dev. = 0.84). 62.96 (35.19) percent of the participants are male (female).

Participants first read a vignette description explaining that a staff auditor needs to conduct two tasks: the audit of cash and the audit of a client-prepared step one of a goodwill impairment test. Based on COR theory, we expect the audit of cash to be an easier task than the audit of a goodwill impairment test. That is, the audit of cash consumes less cognitive resources but also produces less cognitive resources upon completion compared the audit of a goodwill impairment test. Participants were asked to answer four questions related to the prioritization of these tasks: (i) “[w]hich of the two tasks seems to be the most difficult based on the information provided?”, (ii) “[w]hich of the two tasks does Jesse need to start with to maximize audit quality?”, (iii) “[s]uppose there is not enough time to conduct both tasks sufficiently, to which task does Jesse have to devote most attention?”, and (iv) “[b]ased on what you have hitherto experienced in the auditing profession, which task would you expect Jesse to begin with?”. Participants respond on a seven-point Likert scale with 1 labeled as “*the audit of the cash balances*” and 7 labeled as “*the audit of the step one of a goodwill impairment test.*”

In the second part of the survey, participants were asked to assess task prioritization in daily auditing practice. Specifically, they were asked how frequently they think that easy tasks are prioritized in an audit engagement. The answer options are 1 (*never*), 2 (*rarely*), 3 (*occasionally*), 4 (*often*), and 5 (*always*). We also asked four questions about the risks and threats of prioritizing either easy or difficult tasks.¹³ Finally, we asked participants to what extent prioritizing easy tasks is a problem for audit quality compared to other threats to audit quality and the importance of doing research about easy task prioritization.

¹³ Specifically, these questions are: (i) “[p]rioritizing easy tasks poses a risk for the quality of an audit, when there is high time pressure”, (ii) “[p]rioritizing difficult tasks poses a threat for the quality of an audit”, (iii) “[p]rioritizing easy tasks poses a risk for the quality of an audit”, and (iv) “[p]rioritizing difficult tasks poses a threat to the quality of an audit, when there is high time pressure.” Participants respond on a seven-point Likert scale with 1 (7) labeled as totally disagree (totally agree). The midpoint of the scale is “neither agree nor disagree.”

Results

The results of the survey are reported in Table S1. Participants first answered questions with respect to the vignette description. We find that participants judge the audit of the step one of the goodwill impairment test to be significantly more difficult than the audit of cash when testing the mean against the midpoint of the seven-point Likert scale ($M = 6.35, t = 20.88, p < 0.01$, two-tailed for a comparison against the midpoint of the scale). When asked which of the two tasks needs to be prioritized to maximize audit quality, auditors judge that this is the task they perceive most difficult, i.e., the audit of the step one of the goodwill impairment test ($M = 4.78, t = 2.43, p = 0.02$, two-tailed for a comparison against the midpoint of the scale). When asked about what task to provide most attention to when there is not enough time to conduct both tasks, there is no significant difference from the midpoint of the scale ($M = 4.13, t = 0.43, p > 0.10$, two-tailed for a comparison against the midpoint of the scale). Finally, based on what they have experienced in the accountancy sector, participants expect the auditor to begin with the easy task, i.e., the audit of cash ($M = 2.54, t = -5.46, p < 0.01$, two-tailed for a comparison against the midpoint of the scale). Collectively, these results demonstrate that auditors perceive it is better for audit quality to prioritize a difficult task than to prioritize an easy task but expect auditors to start with the easy task. Hence, participants expect auditors to behave in a way that is not consistent with maximizing audit quality.

Auditors next evaluate statements regarding their experiences and perceptions in auditing practice. First, participants in general expect auditors to prioritize easy tasks quite frequently. 81.5 (50.0) percent of the participants expects easy task prioritization to take place at least occasionally (often). The mean answer of the frequency item is 3.41 (*st. dev.* = 1.02), which is significantly higher than 'Occasionally' ($t = 2.94, p < 0.01$, two-tailed). Second, we find that participants agree

with the statements that prioritizing easy tasks poses a risk for audit quality in general ($M = 4.37$, $t = 1.53$, $p = 0.08$, two-tailed for a comparison with the midpoint of the scale), and also when there is higher time pressure ($M = 4.96$, $t = 5.05$, $p < 0.01$, two-tailed for a comparison with the midpoint of the scale). The mean of participants answers with respect to the negative implications for audit quality of the prioritization of difficult tasks does not significantly differ from the midpoint of the scale ($M = 3.85$, $t = -0.40$, $p > 0.10$, two-tailed for the general situation; $M = 4.00$, $t = 0.00$, $p > 0.10$, two-tailed for the case with time pressure). Hence, our results suggest that auditors perceive easy task prioritization to be a risk for audit quality, but do not think that prioritizing difficult tasks is a risk for audit quality. Finally, we ask participants to (i) compare easy task prioritization to other threats to audit quality on a five-point Likert scale with 1 (*Not at all*) - 5 (*To a large extent*) (midpoint is "*Somewhat*"), and (ii) ask them how important it is that researchers study the prioritization of easy tasks, measured on a five point Likert scale with 1 (*Unimportant*) - 5 (*Very important*). The midpoint is "*Moderately important*." With respect to the former question, we find a mean of 2.78 on a five-point Likert-scale (*st. dev.* = 0.79). With respect to the latter question, we find a mean of 2.96 on a five-point Likert scale (*st. dev.* = 1.10).

Overall, the results of the survey show that auditors can distinguish easy from difficult tasks, judge easy task prioritization as a threat for audit quality and expect others to start with an easy audit task. As stated in the first paragraph of this section, we urge the reader to interpret these results with caution.

Table S2 - Responses to the Post-Experimental Questionnaire Items Between Conditions

Table S2 reports mean responses to our post-experimental questionnaire items for both Easy First and Difficult First conditions. For the first three items, we ask participants to evaluate (i) whether they found the audit of cash difficult, (ii) whether they found the audit of the goodwill

impairment test difficult, and (iii) whether they found the audit of the goodwill impairment test more difficult than the audit of cash, all on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). We find that participants perceive the audit of the goodwill impairment test to be significantly more difficult than the audit of cash (4.97 vs. 2.91, $t = 11.66$, $p < 0.01$, two-tailed, test untabulated). Next to that, participant judge statement (iii) significantly higher than the midpoint of the scale ($M = 5.51$, $t = 11.37$, $p < 0.01$, two-tailed, test untabulated), confirming that the audit of the goodwill impairment test is indeed judged as significantly more difficult than the audit of cash. The first three items in Table S2 indicate that we do not find evidence that these assessments differ between conditions ($p > 0.10$, two-tailed), indicating that the ordering does not indicate the perceived difficulty of the tasks.

We find that participants rate the item "[t]he order in which I had to conduct the tasks was the order I would have selected myself if I had the choice" significantly higher in the Easy First condition than in the Difficult First condition (4.73 vs. 3.73, $t = -3.026$, $p = 0.003$, two-tailed). This suggests that when participants would be given the choice which task to prioritize, they would most likely have prioritized the easy tasks. We further ask two questions related to the participants' experience with the audits of cash balances and goodwill, and find that such experience is not significantly different between conditions ($p > 0.10$, two-tailed).

Table S3 - Experience Effects

In our sample there are 3 interns / trainees (2.63 percent), 102 staff auditors (89.47 percent), 8 senior staff auditors (7.01 percent), and 1 manager (0.88 percent). Table S3 reports the effects of work experience on performance in the tasks of Study 1. Overall, we do not find that performance is significantly affected by work experience, except for the *Bank 1* variable where we find a significant negative effect for work experience ($p = 0.058$, two-tailed). Solely focusing on the staff

auditors does not change any of our inferences, except for that the result for the total issues in the goodwill task becomes significant at the five-percent-level two-tailed, instead of the ten-percent-level two-tailed (subsample of staff auditors 0.81 vs. 0.50, $t = 2.19$, $p = 0.032$).

Next, we run an analysis of variance of our dependent variables on the rank in the audit firm. We only find significant variation for *Bank 1* ($F = 7.77$, $p < 0.001$, two-tailed). Specifically, we find that the manager and senior staffs all have this correct, 95.10 percent of staff auditors has this correct, and 2 out of 3 (66.67 percent) of interns/trainees. For the other variables *Cash on Hand* ($F = 0.24$, $p = 0.867$), *Bank 2* ($F = 2.10$, $p = 0.104$), *Cutoffs* ($F = 1.85$, $p = 0.142$), *Reasonableness* ($F = 0.18$, $p = 0.907$), *Surface Issues* ($F = 0.66$, $p = 0.579$), *Deep Issues* ($F = 0.38$, $p = 0.765$), *Total Issues* ($F = 1.09$, $p = 0.355$), and *Contact Immediately* ($F = 1.77$, $p = 0.158$) we find no significant difference (all p-values are two-tailed). Hence, we do not find variation in performance is explained by variation in rank. We also find that our inferences for the effect of Easy First on the dependent variables remains the same when controlling for rank.

We next analyze our different experience variables across conditions to check if randomization was successful. For *Work Experience* ("How many years of work experience as an auditor do you have? Please round to the nearest year.") we find that this is on average 1.311 years in the *EasyFirst* and 1.354 years in the *Difficult First* condition. The difference is not significant at conventional significant levels ($F = 0.05$, $p = 0.819$, two-tailed). This indicates that randomization of experience levels was successful.

Study 2 - Additional Analyses and Robustness Tests

Table S4 - Responses to the Post-Experimental Questionnaire Items Between Conditions

Table S4 reports mean responses to our post-experimental questionnaire items for both *Easy First* and *Difficult First* conditions. For the first three items, we ask participants to evaluate

(i) whether they found the audit of the Feeder 2000 patent (i.e., the easy task) difficult, (ii) whether they found the audit of the Robofer patent (i.e., the difficult task) difficult, and (iii) whether they found the audit of the Robofer patent more difficult than the audit of the Feeder 2000 patent, all on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Across conditions, we find that participants classify the Robofer audit indeed as significantly more difficult than the Feeder 2000 audit (3.48 vs. 3.13., $t = -2.13$, $p = 0.0365$, two-tailed). We find that participants in the Difficult First condition rate the audit of the Robofer patent (i.e., the difficult task) as more difficult than the participants in the Easy First condition ($t = 2.45$, $p = 0.016$, two-tailed). For the audit of the Feeder 2000 (i.e., the easy task) we do not find a difference that is statistically significant at conventional levels, but do find that it is directionally rated as more difficult in the Easy First condition. Similarly, we find non-significant results for the rating of the third item across conditions, but directionally the difference in difficulty between the Robofer and Feeder 2000 audit was larger in the Difficult First condition. This suggests that there may be learning effects, where the second tasks is judged as easier than the first task.

Next, we find that participants in the Easy First condition tend to significantly agree more with the statement "[t]he order in which I had to conduct the tasks was the order I would have selected myself if I had the choice" ($t = -3.82$, $p < 0.001$, two-tailed). This suggests that although the participants could not choose in which order they conducted the tasks, if they were given the choice there would likely be easy task prioritization. For the other items reported in Table S4, we do not find any significant differences across conditions.

Study 3 - Additional Analyses and Robustness Tests

Comprehension Checks (untabulated). Two multiple-choice questions asked after the background information measured whether participants properly understood how DCF models work. These

questions measured whether participants understood that a decrease in the discount rate increases the present value of the cash flows and that an increase in the royalty rate increases the present value of the cash flows. 164 (92.6 percent) participants answered the first question correctly and 163 (92.1 percent) participants answered the second question correctly. In general, participants properly understood the relationships between valuations and input parameters in DCF models.

Manipulation Checks. In the post-experimental questionnaire, we asked participants several questions about the extent to which they felt psychological ownership during the case. We used the four-item Van Dyne and Pierce (2004) scale tailored to our setting and measured responses on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) (Cronbach's $\alpha = 0.92$). We find that perceived psychological ownership is significantly higher in the enhanced psychological ownership conditions ($M = 4.86$) than in the limited psychological ownership conditions ($M = 3.21$), indicating a successful manipulation of psychological ownership ($p < 0.01$, two-tailed). Next, we also elicited participants' feelings about time pressure during the experiment. In the post-experimental questionnaire, we asked three questions about time pressure.¹⁴ We find that time pressure is significantly higher ($p < 0.01$, two-tailed) in the higher time pressure conditions ($M = 5.76$) than in the lower time pressure conditions ($M = 4.66$). Despite this difference, the time pressure in the lower time pressure condition was higher than the midpoint of the scale. Therefore, we conclude that there does not seem to be a condition with low time pressure, but rather one with moderate time pressure and one with high time pressure.

Learning (untabulated). We tried to minimize the likelihood that learning effects are different across conditions in our experiment and that learning effects are not significantly different

¹⁴ We asked (i) to what extent participants experienced time pressure when getting familiar with the tasks, (ii) to what extent participants experienced time pressure while conducting the tasks, and (iii) to what extent they felt they had enough time to conduct the tasks properly. The three items were measured on a Likert scale ranging from (1) strongly disagree to (7) strongly agree. The midpoint of the scale is "neither agree nor disagree."

for those that prioritize the easy vis-à-vis the difficult task. Although the results from Experiment 2 suggest that there are learning effects, we find that overall performance is better in the Difficult First Condition, suggesting that prioritizing the easy task is suboptimal. The results of the comprehension checks about the underpinnings of DCF models confirm that our participants' understanding of DCF models is high. To further test the learning explanation, we included the following item in the post-experimental questionnaire, "*When I had to decide which audit task to conduct first, the expected learning effects associated with the task influenced my decision,*" on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). If learning effects indeed make easy task prioritization more likely, we expect that participants who prioritized the easy task perceived learning effects to be more important than participants who prioritized the difficult task. However, we do not find this. Specifically, participants who prioritized the easy task do not rate the item significantly different from participants who prioritized the difficult task (4.07 vs. 3.94, $t = -0.39$, $p > 0.10$, two-tailed). We also conduct a median split wherein we compare easy task prioritization among participants who rated the item above the median and participants who rated the item equal to or below the median. A t -test indicates no significant differences in easy task prioritization between the two groups (0.73 vs. 0.67, $t = -0.95$, $p > 0.10$, two-tailed). Overall, the results of our analyses suggest that even if there was a learning effect, we do not find that this learning effect is not perceived differently based on the participant's task prioritization choice. These results should be interpreted with care as people are generally not very good at assessing why they behaved in a certain way (Lichtenstein and Slovic 1971), which reduces the validity of using an item from the post-experimental questionnaire to assess behavior during the experiment.

Table S5: Inferential Statistics Regarding Seeded Errors Identified

In subsequent additional tests, we investigate whether performance differs across conditions for Study 3, and whether performance differs conditional on the task prioritized. It is important to note that in Study 3 participants self-select in which task they conduct first (unlike in Study 1 and Study 2, which make Study 1 and Study 2 more suitable to study performance effects than Study 3). Also, compared with Study 2, Study 3 only has three seeded errors per task instead of six. We document that participants detect, on average, 3.03 out of six seeded errors (*st. dev.* = 1.53). Out of 177 participants, 163 (92.1 percent) detect at least one seeded error. Table S5 reports an ANOVA model with the *Number of Seeded Errors Identified* as the dependent variable. Not surprisingly, participants in the low-time-pressure conditions, who had twelve minutes to complete the tasks, outperform participants in the high-time-pressure conditions, who had only eight minutes ($F = 6.93, p < 0.01$, two-tailed). Furthermore, the ANOVA model shows that both a main effect for psychological ownership as well as the interaction of psychological ownership and time pressure are insignificant ($p > 0.10$, two-tailed).

Moreover, we test whether task prioritization affects performance. Before discussing the results, however, we wish to acknowledge a few limitations on the validity of our inferences from such performance analyses. First, in our experiment, auditors self-select into prioritizing an easy task or a difficult task, which means that auditors who prioritize the easy task likely differ from auditors who prioritize the difficult task. Hence, when we compare the performance of both groups of auditors, we must make our inferences about the causal effect of easy task prioritization on performance with caution.

We find that participants who prioritized the difficult task detected significantly more errors in the difficult task than did participants who started with the easy task (1.91 vs. 1.35, $t = -3.49, p < 0.01$, two-tailed). Similarly, we find that participants who started with the easy task

detected significantly more errors in the easy task than did participants who started with the difficult task (1.72 vs. 1.10, $t = 3.67$, $p < 0.01$, two-tailed). These results indicate that participants perform relatively better on the task they prioritize. However, for total errors in both tasks, we find no significant differences between participants who prioritized the difficult task and participants who prioritized the easy task (3.07 vs. 3.02, $t = 0.23$, $p > 0.10$, two-tailed). Hence, results from this additional analysis provide a first indication of the performance effects of easy task prioritization, and future research can use research designs tailored to examining performance effects.

Table S6 and Figure S3 - Time Spent on Easy Task and Difficult Task

We analyze the amount of time participants spent on both tasks to investigate whether easy task prioritization has implications for effort allocation across tasks. We know from prior literature that auditors reduce their effort and workload in certain situations (e.g., López and Peters 2012; Pierce and Sweeney 2004), but how effort is allocated among different types of tasks remains an empirical question. Panel A of Table S6 shows the proportion of total time spent on the easy task by condition. Across all conditions, participants spent, on average, 59.18 (40.82) percent of their time on the easy (difficult) task. An untabulated t -test shows that this is significantly different from 50 percent ($t = 4.25$, $p < 0.01$, two-tailed). We analyze whether the prioritization of easy tasks amounts to less effort spent on the difficult task. Figure S3 graphically shows the *Time Spent on Easy Task* scaled by the total amount of time spent on both tasks and conditional on the first task chosen. We find that participants who prioritize the easy task spend significantly more time on the easy task than did participants who prioritized the difficult task (73.38 percent versus 26.84 percent, $t = -14.92$, $p < 0.01$, two-tailed). Similarly, we find that participants who prioritized the difficult task spent significantly more time on the difficult task than did participants who prioritized the easy task (73.16 percent versus 26.61 percent, $t = 14.92$, $p < 0.01$, two-tailed). In sum, easy task prioritization

is positively associated with the relative time spent on the easy task. This suggests that task prioritization is an important antecedent of effort allocation among tasks that vary in difficulty.

Table S7 - Accountability

Accountability is defined as “the implicit or explicit expectation that one may be called on to justify one’s beliefs, feelings and actions to others” (Lerner and Tetlock 1999, p. 255). Because of the presence of audit reviews, accountability is typically considered quite high in audit settings. It is often argued that accountability induces auditors to exhibit behavior that improves audit quality. Assuming that prioritization of easy tasks is a threat for audit quality, one could argue that the emphasis on accountability in audit settings will weaken easy task prioritization. Stated differently, because our participants conduct an individual scenario-based experiment without an audit review, it could be that they do not feel accountable and because of this feeling prioritize easy tasks. To test for this potential external validity threat, we elicited participants’ perceived accountability during the experiment using one item in the post-experimental questionnaire. We asked participants to evaluate the statement “*During the audit engagement, I felt accountable to the audit team leader*” on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The mean response to this item is 3.71 (*st. dev.* = 1.65), which is significantly lower than the midpoint of the scale ($t = -2.37, p = 0.019$, two-tailed). We use a logit regression to test whether variation in *Accountability* is significantly related to variation in *Easy Task Prioritization*. Table 6 reports these regressions. As accountability can be considered a component of psychological ownership (Avey, Avolio, Crossley, and Luthans 2009), we also control for the psychological ownership manipulation. We indeed find that accountability and psychological ownership are significantly related to each other. That is, participants in the enhanced psychological ownership conditions report significantly higher accountability levels ($M = 4.04$) than participants in the

limited psychological ownership conditions ($M = 3.40$, difference = 0.64, $t = -2.60$, $p = 0.01$, two-tailed). This is consistent with Avey *et al.* (2009). In all specifications, we find that the effects of perceived accountability on easy task prioritization are statistically insignificant (all specifications report $p > 0.10$, two-tailed).¹⁵ Hence, our results do not support that a lack of accountability in our experimental setting drives our results.

¹⁵ In addition, we create a dummy variable for accountability, which takes “1” if reported accountability is higher than the midpoint of the scale and “0” if reported accountability is lower than the midpoint of the scale. In untabulated analyses, we conduct the same regressions as in Table 6 and find that this does not change our inferences ($p > 0.10$, two-tailed, in all specifications). Also, when we create a dummy variable for accountability, where we use a median split, top quartile, top quintile, and top-decile, we find no significant relationship between accountability and easy task prioritization.

REFERENCES ONLINE APPENDIX

- Avey, J. B., Avolio, B. J., Crossley, C. D., & Luthans, F. 2009. Psychological ownership: Theoretical extensions, measurement, and relation to work outcomes. *Journal of Organizational Behavior*, 30(2), 173-191.
- Cacioppo, J. T., & Petty, R. E. 1982. The Need for Cognition. *Journal of Personality and Social Psychology*, 42(1), 116-131.
- Gosling, S. D., Rentfrow, P. J., & Swann Jr, W. B. 2003. A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37(6), 504-528.
- Kadous, K., & Zhou, Y. 2019. How does intrinsic motivation improve auditor judgment in complex audit tasks?. *Contemporary Accounting Research*, 36(1), 108-131.
- Katz-Navon, T. A. L., Naveh, E., & Stern, Z. 2005. Safety Climate in Health Care Organizations: A Multidimensional Approach. *Academy of Management Journal*, 48(6), 1075-1089.
- Lerner, J. S., & Tetlock, P. E. 1999. Accounting for the effects of accountability. *Psychological Bulletin*, 125(2), 255-275.
- Lichtenstein, S., & Slovic, P. (1971). Reversals of preference between bids and choices in gambling decisions. *Journal of Experimental Psychology*, 89(1), 46-75.
- López, D. M., & Peters, G. F. 2012. The effect of workload compression on audit quality. *Auditing: A Journal of Practice and Theory*, 31(4), 139-165.
- Pierce, B., & Sweeney, B. 2004. Cost-quality conflict in audit firms: an empirical investigation. *European Accounting Review*, 13(3), 415-441.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. 2002. The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3(1), 71-92.

FIGURES SUPPLEMENTAL INFORMATION

FIGURE S1-A: Feeder 2000 Audit in Study 2

	B	C	D	E	F	G	H	I
2	DISCOUNTED CASH FLOW ANALYSIS							
3	FEEDER 2000							
4	2022 Revenues of CMG Machines	€ 40,000,000		Growth Rates				
5				Years 1-4	10%			
6	Discount rate	10%		Years 5-7	0%			
7	Royalty rate	10%						
8								
9	Year	1	2	3	4	5	6	7
10	Agrifirm	2023	2024	2025	2026	2027	2028	2029
11	Revenues of CMG Machines	€ 44,000,000	48,400,000	52,800,000	58,080,000	63,888,000	64,468,800	64,468,800
12		=C4+F5*C4	=C11+F5*C11	=D11+F5*C11	=E11+F5*E11	=F11+F5*F11	=F11+F5*G11	=H11+F6*H11
13	Patent Royalty (10%)	€ 4,400,000	4,840,000	5,280,000	5,808,000	6,388,800	6,446,880	-
14		=C7*C11	=C7*D11	=C7*E11	=C7*F11	=C7*G11	=C7*H11	=F6*I11
15								
16	Present Value of CF from Royalty	€ 4,400,000	4,000,000	3,966,942	3,966,942	5,280,000	3,639,096	-
17		=C13	=D13/(1+C6)^(D9)	=E13/(1+C6)^(E9)	=F13/(1+C6)^(F9)	=G13/(1+C6)^(G9)	=H13/(1+C6)^(H9)	=I13/(1+C6)^(I9)
18								
19	Total Present Value of CF	€ 25,252,980	=SUM(C16:I16)					

Figure S2-A presents a screenshot of the audit task related to the Feeder 2000 patent, i.e., the easier task in Study 2. Participants were asked to conduct audit procedures on the Discounted Cash Flow model provided by the client (Information Provided by Entity). More specifically, it was their job to verify the accuracy and reliability of the client-provided model, operationally they were asked to identify (if any) errors in the formulas used by the client in their spreadsheets. Participants were able to alter the spreadsheet which was embedded in the experimental Qualtrics environment.

FIGURE S1-B: Robofer Audit in Study 2

	B	C	D	E	F	G	H	I
2	DISCOUNTED CASH FLOW ANALYSIS							
3	ROBOFER							
4	2022 Revenue of CMG Machines	€ 40,000,000		Growth Rates			Royalty Rate	
5				Years 1-3	15%		Years 1-3	12%
6	Discount rate	10%		Years 4-5	-5%		Years 4-5	9%
7				Years 6-7	-12%		Years 6-7	7%
8								
9	Year	1	2	3	4	5	6	7
10	Agrifirm	2023	2024	2025	2026	2027	2028	2029
11	Revenues of CMG Machines	€ 46,000,000	52,900,000	60,835,000	69,960,250	66,462,238	61,565,020	54,177,218
12		=C4+F5*C4	=C11+F5*C11	=D11+F5*D11	=E11+F5*E11	=F11+F6*F11	=F11+F7*F11	=H11+F7*H11
13	Patent Royalty	€ 5,520,000	6,348,000	7,300,200	6,296,423	5,981,601	5,540,852	4,875,950
14		=I5*C11	=I5*D11	=I5*E11	=I6*F11	=I6*G11	=I6*H11	=I6*I11
15								
16	Present Value of Cash Flow from Royalty	€ 5,018,182	5,246,281	5,484,748	4,300,541	3,714,104	3,127,666	3,330,339
17		=C13/(1+C6)^(C9)	=D13/(1+C6)^(D9)	=E13/(1+C6)^(E9)	=F13/(1+C6)^(F9)	=G13/(1+C6)^(G9)	=H13/(1+C6)^(H9)	=I13/(1+C6)^(I9)
18								
19	Total Present Value of Cash Flow	€ 25,203,680	=SUM(D16:I16)					

Figure S1-B presents a screenshot of the audit task related to the Robofer patent, i.e., the difficult task in Study 2. Participants were asked to conduct audit procedures on the Discounted Cash Flow model provided by the client (Information Provided by Entity). More specifically, it was their job to verify the accuracy and reliability of the client-provided model, operationally they were asked to identify (if any) errors in the formulas used by the client in their spreadsheets. Participants were able to alter the spreadsheet which was embedded in the experimental Qualtrics environment.

FIGURE S2-A: Feeder 2000 Audit in Study 3

	B	C	D	E	F	G	H	I
2	DISCOUNTED CASH FLOW ANALYSIS							
3	FEEDER 2000							
4	2018 Revenues of CMG Machines	€ 40,000,000		Growth Rates				
5				Years 1-4	10%			
6	Discount rate	10%		Years 5-7	0%			
7	Royalty rate	10%						
8								
9	Year	1	2	3	4	5	6	7
10	Agrifirm	2019	2020	2021	2022	2023	2024	2025
11	Revenues of CMG Machines	€ 44,000,000	48,400,000	53,240,000	58,564,000	64,420,400	70,862,440	70,862,440
12		=C4+F5*C4	=C11+F5*C11	=D11+F5*D11	=E11+F5*E11	=F11+F5*F11	=G11+F5*G11	=H11+F5*H11
13	Patent Royalty (10%)	€ 4,400,000	4,840,000	5,324,000	5,856,400	6,442,040	7,086,244	7,086,244
14		=C7*C11	=C7*D11	=C7*E11	=C7*F11	=C7*G11	=C7*H11	=C7*I11
15								
16	Present Value of CF from Royalty	€ 4,400,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	3,636,364
17		=C13	=D13/(1+C6)^(D9)	=E13/(1+C6)^(E9)	=F13/(1+C6)^(F9)	=G13/(1+C6)^(G9)	=H13/(1+C6)^(H9)	=I13/(1+C6)^(I9)
18								
19	Total Present Value of CF	€ 28,036,364	=SUM(C16:I16)					

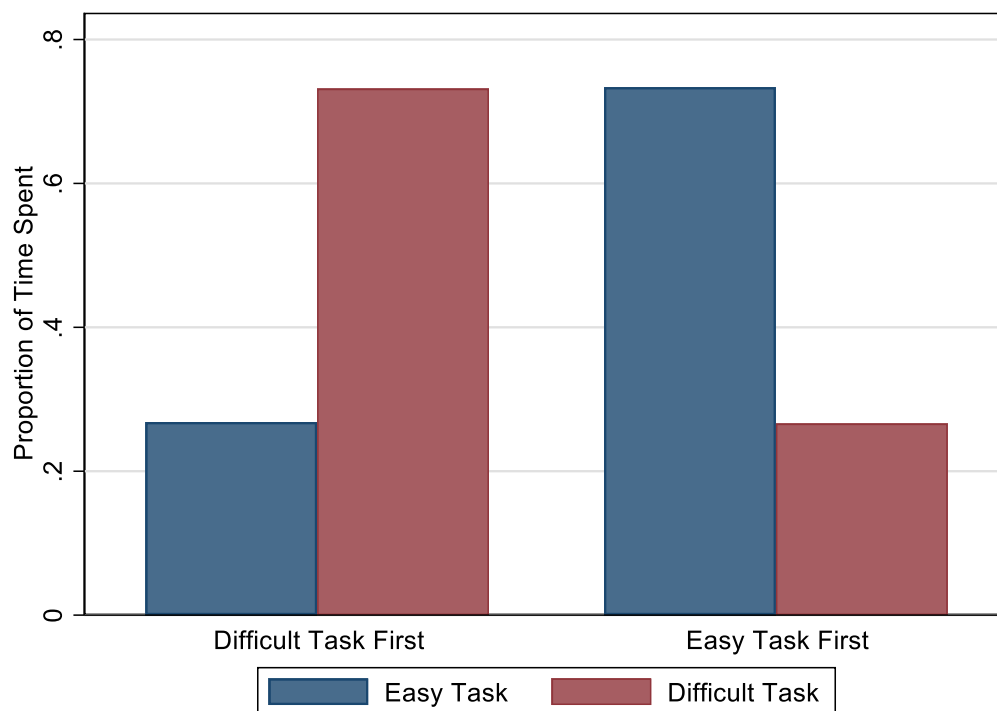
Figure S2-A presents a screenshot of the audit task related to the Feeder 2000 patent, i.e., the easier task in Study 3. Participants were asked to conduct audit procedures on the Discounted Cash Flow model provided by the client (Information Provided by Entity). More specifically, it was their job to verify the accuracy and reliability of the client-provided model, operationally they were asked to identify (if any) errors in the formulas used by the client in their spreadsheets. Participants were able to alter the spreadsheet which was embedded in the experimental oTree environment.

FIGURE S2-B: Robofer Audit in Study 3

	B	C	D	E	F	G	H	I
2	DISCOUNTED CASH FLOW ANALYSIS							
3	ROBOFER							
4	2018 Revenue of CMG Machines	€ 40,000,000		Growth Rates			Royalty Rate	
5				Years 1-3	15%		Years 1-3	12%
6	Discount rate	10%		Years 4-5	-5%		Years 4-5	9%
7				Years 6-7	-12%		Years 6-7	7%
8								
9	Year	1	2	3	4	5	6	7
10	Agrifirm	2019	2020	2021	2022	2023	2024	2025
11	Revenues of CMG Machines	€ 46,000,000	52,900,000	60,835,000	57,793,250	54,903,588	50,858,060	44,755,093
12		=C4+F5*C4	=C11+F5*C11	=D11+F5*D11	=E11+F6*E11	=F11+F6*F11	=F11+F7*F11	=H11+F7*H11
13	Patent Royalty	€ 5,520,000	6,348,000	7,300,200	5,201,392.50	4,941,323	4,577,225	3,132,856
14		=I5*C11	=I5*D11	=I5*E11	=I6*F11	=I6*G11	=I6*H11	=I7*I11
15								
16	Present Value of Cash Flow from Royalty	€ 5,018,182	5,246,281	5,484,748	3,552,621	3,068,173	2,583,724	2,139,783
17		=C13/(1+C6)^(C9)	=D13/(1+C6)^(D9)	=E13/(1+C6)^(E9)	=F13/(1+C6)^(F9)	=G13/(1+C6)^(G9)	=H13/(1+C6)^(H9)	=I13/(1+C6)^(I9)
18								
19	Total Present Value of Cash Flow	€ 27,093,512	=SUM(C16:I16)					

Figure S2-B presents a screenshot of the audit task related to the Robofer patent, i.e., the difficult task in Study 3. Participants were asked to conduct audit procedures on the Discounted Cash Flow model provided by the client (Information Provided by Entity). More specifically, it was their job to verify the accuracy and reliability of the client-provided model, operationally they were asked to identify (if any) errors in the formulas used by the client in their spreadsheets. Participants were able to alter the spreadsheet which was embedded in the experimental oTree environment.

FIGURE S3
Study 3: Proportion of Time Spent on Both Tasks Conditional on First Task Chosen



Note: Figure S3 presents the *Proportion of Time Spent* on both tasks, conditional on the task prioritized. *Proportion of Time Spent* is the time spent by the participant on the particular task, scaled by the total time spent on both tasks. The blue (left) bar is the *Proportion of Time Spent* on the easy task. The red (right) bar is the *Proportion of Time Spent* on the difficult task.

TABLES SUPPLEMENTAL INFORMATION

TABLE S1
Additional Survey Study: Descriptive Statistics
Survey Items

Item	Mean	SD	t	p	Scale
(1) Which of the two tasks seems to be the most difficult based on the information provided?	6.35	0.83	20.88	< 0.01	1 (Cash) - 7 (Goodwill)
(2) Which of the two tasks can Jesse better start with to maximize audit quality?	4.78	2.35	2.43	0.02	1 (Cash) - 7 (Goodwill)
(3) Suppose there is not enough time to conduct both tasks sufficiently, to which task does Jesse have to provide most attention?	4.13	2.22	0.43	0.67	1 (Cash) - 7 (Goodwill)
(4) Based on what you have hitherto experienced in the accountancy sector, which task would you expect Jesse to begin with?	2.54	1.97	-5.46	< 0.01	1 (Cash) - 7 (Goodwill)
(5) How frequent do you think that auditors prioritize easy tasks in an audit?	3.41	1.02	2.94	< 0.01	1 (Never) - 5 (Always)
(6) Prioritizing easy tasks poses a risk for the quality of an audit, when there is high time pressure.	4.96	1.40	5.05	< 0.01	1 (Strongly disagree) - 7 (Strongly agree)
(7) Prioritizing difficult tasks poses a danger for the quality of an audit.	3.85	2.73	-0.40	0.69	1 (Strongly disagree) - 7 (Strongly agree)
(8) Prioritizing easy tasks poses a risk for the quality of an audit.	4.37	1.53	1.78	0.08	1 (Strongly disagree) - 7 (Strongly agree)
(9) Prioritizing difficult tasks poses a danger to the quality of an audit, when there is high time pressure.	4.00	1.59	0.00	1.00	1 (Strongly disagree) - 7 (Strongly agree)
(10) To what extent is the prioritization of easy tasks an important problem for audit quality in comparison to other threats for audit quality?	2.78	0.79	-2.06	0.04	1 (Not at all) - 5 (To a large extent)
(11) How important is it that researchers study the prioritization of easy tasks?	2.96	1.10	-0.25	0.81	1 (Unimportant) - 5 (Very important)

TABLE S2
Study 1: Post-Experimental Questionnaire Items and Test Between-Conditions

Item	Easy First		Difficult First		Difference
	Mean	SE	Mean	SE	
(1) The audit of the cash was difficult.	2.83	0.18	3.02	0.21	$t = 0.675, p = 0.501$
(2) The audit of the step one of the goodwill impairment test was difficult.	5.03	0.18	4.90	0.19	$t = -0.510, p = 0.611$
(3) The audit of the step one of the goodwill impairment test was more difficult than the audit of the cash.	5.38	0.20	5.69	0.16	$t = 1.151, p = 0.126$
(4) I enjoyed doing the audit tasks.	4.26	0.19	4.13	0.20	$t = -0.478, p = 0.634$
(5) It was difficult to keep concentrated for a long time during the audit tasks.	4.08	0.20	4.08	0.24	$t = 0.024, p = 0.981$
(6) The order in which I had to conduct the tasks was the order I would have selected myself if I had the choice.	4.73	0.21	3.73	0.25	$t = -3.026, p = 0.003$
(7) I think the order in which I had to conduct the audit tasks was beneficial for audit quality.	3.98	0.19	4.33	0.20	$t = 1.226, p = 0.223$
(8) How often have you been involved in auditing the cash during an audit engagement?	3.77	0.15	3.40	0.18	$t = -1.60, p = 0.113$
(9) How often have you been involved in auditing the goodwill during an audit engagement?	1.64	0.10	1.67	0.13	$t = 0.192, p = 0.849$
(10) In a typical audit, I start with an easy rather than a difficult task.	3.47	0.11	3.25	0.16	$t = -1.15, p = 0.252$

Notes: This table includes the PEQ-items for Study 1 and include the mean, standard error, and a *t*-test between them. The first seven items were measured using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The midpoint of the scale is "*neither agree nor disagree*." The items 8, 9, and 10 are measured on a five-point Likert scale 1 (*never*), 2 (*rarely*), 3 (*occasionally*), 4 (*often*), and 5 (*very often*). All *p*-values are two-tailed.

TABLE S3
Study 1: Work Experience Effects on Performance

Panel A: Test for the Audit of Cash Balances (p-value)

Variable	Cash on Hand	Bank 1	Bank 2	Cutoff	Total
Work Experience	1.69 (0.907)	-0.31* (0.058)	-0.13 (0.339)	0.27 (0.823)	-0.09 (0.750)
Easy First	0.16 (0.678)	-0.17 (0.684)	0.41 (0.160)	-0.43* (0.080)	0.17 (0.772)
(Pseudo) R-Squared	0.37%	8.66%	2.49%	2.03%	0.72%
N	114	114	114	114	114

Panel B: Test for the Goodwill Impairment Test (p-value)

Variable	Reason- ableness	Surface issues	Deep issues	Total issues	Contact immediately
Work Experience	0.75 (0.620)	-0.01 (0.862)	-0.00 (0.937)	-0.01 (0.844)	0.03 (0.812)
Easy First	0.52* (0.094)	0.13 (0.910)	-0.26*** (0.006)	-0.25* (0.071)	-0.50** (0.044)
(Pseudo) R-Squared	0.37%	0.00%	5.28%	3.12%	2.81%
N	114	114	114	114	114

Note: ***, **, and * indicate significance levels at the 1%, 5%, and 10% level, respectively. All significance levels are two-tailed. First, *Reasonableness* indicates auditors' assessment of the overall reasonableness of the fair value, measured on an 11-point Likert scale, ranging from 0 (*not at all likely to be reasonable*) to 10 (*extremely likely to be reasonable*). Second, *Surface Issues* is the number of surface issues detected (two in total). Third, *Deep Issues* is defined in the same way as *Surface Issues*, but then for the number of deep issues (three in total). Fourth, *Total Issues* is the sum of *Surface Issues* and *Deep Issues*. Finally, consistent with Kadous and Zhou (2019), *Contact Directly* is an indicator variable that equals one when auditors indicate the best follow-up action is to call their manager immediately, and zero otherwise. *Work Experience* is an open-ended question where we ask participants: " How many years of work experience as an auditor do you have? Please round to the nearest year."

TABLE S4
Study 2: Post-Experimental Questionnaire Items

Item	Easy First		Difficult First		Difference
	Mean	SE	Mean	SE	
(1) The audit of the Feeder 2000 patent was difficult.	3.36	0.21	2.92	0.23	$t = -1.40, p = 0.165$
(2) The audit of the Robofer patent was difficult.	3.08	0.24	3.92	0.24	$t = 2.45, p = 0.016$
(3) The audit of the Robofer patent was more difficult than the audit of the Feeder 2000 patent.	4.13	0.24	4.56	0.20	$t = 1.36, p = 0.179$
(4) The order in which I had to conduct the tasks was the order I would have selected myself if I had the choice.	5.00	0.22	3.61	0.29	$t = -3.82, p < 0.001$
(5) I enjoyed conducting the audit tasks	5.15	0.25	5.00	0.26	$t = -0.43, p = 0.669$
(6) It was difficult for me to remain concentrated for a long time during the audit tasks.	2.92	0.26	3.06	0.27	$t = 0.35, p = 0.727$
(7) I think the order in which I had to conduct the audit tasks was beneficial for audit quality.	4.18	0.27	4.56	0.26	$t = 1.00, p = 0.320$
(8) I considered the inherent risk to be higher in one audit task than in the other audit task.	4.08	0.31	4.08	0.32	$t = 0.01, p = 0.989$
(9) When I performed the audit tasks, I experienced time pressure.	4.39	0.27	3.92	0.29	$t = -1.15, p = 0.251$
(10) I felt like I didn't have enough time to perform the audit tasks really well.	5.11	0.22	4.54	0.28	$t = -1.59, p = 0.116$
(11) During the training phase, when I could familiarize myself with the DCF models, I already discovered errors.	4.21	0.28	4.50	0.32	$t = 0.70, p = 0.485$
(12) How often have you audited a discounted cash flow model?	1.87	0.20	1.47	0.14	$t = -1.61, p = 0.111$
(13) How often have you audited a fair value estimate?	2.05	0.21	1.67	0.17	$t = -1.41, p = 0.163$

Notes: This table includes the PEQ-items for Study 1 and include the mean, standard error, and a t -test between them. The first eleven items were measured using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The midpoint of the scale is "*neither agree nor disagree*." The items 12 and 13 are measured on a five-point Likert scale 1 (*never*), 2 (*rarely*), 3 (*occasionally*), 4 (*often*), and 5 (*very often*). All p -values are two-tailed.

TABLE S5
Study 3: Inferential Statistics Regarding Seeded Errors Identified

Panel A: ANOVA

Source	df	F	Two-sided p-value
Psychological Ownership	1	0.20	0.652
Time Pressure	1	6.93	< 0.01 ***
Psychological Ownership × Time Pressure	1	0.00	0.953

Panel B: Main Effects

Variable	df	F	Two-sided p-value
Psychological Ownership	1	0.14	0.704
Time Pressure	1	6.97	< 0.01 ***
Easy Task Prioritization	1	0.05	0.818

Note: ***, **, and * indicate significance levels at the 1%, 5%, and 10% level, respectively. All significance levels are two-tailed. The dependent variable is the total number of seeded errors identified. In total, it was possible to identify six seeded errors, three in the easy task and three in the difficult task. *Easy Task Prioritization* equals one if participants prioritized the easy task, and zero if participants prioritized the difficult task.

TABLE S6
Study 3: Proportion of Time Spent on Easy Task (Standard Deviation) [N] by Condition.

	Psychological Ownership		
	Limited	Enhanced	Collapsed
Lower Time Pressure	0.54 (0.22) [40]	0.52 (0.25) [39]	0.53 (0.24) [79]
Higher Time Pressure	0.66 (0.33) [52]	0.62 (0.30) [46]	0.64 (0.31) [98]
Collapsed across Time Pressure	0.61 (0.29) [92]	0.57 (0.28) [85]	0.59 (0.30) [177]

Note: Table S6 presents the number of participants per condition that prioritize the easy task as a proportion of the number of participants in that condition. The dependent variable *Easy Task Prioritization* equals one if participants prioritized the easy task, and equals zero if participants prioritized the difficult task.

TABLE S7
Study 3: Logistic Regression of *Easy Task Prioritization* on *Accountability*

Variable	(1) Coefficient (z-stat)	(2) Coefficient (z-stat)	(3) Coefficient (z-stat)	(4) Coefficient (z-stat)
Accountability	0.031 (0.31)	0.060 (0.58)	0.058 (0.56)	0.048 (0.42)
Psychological Ownership		-0.475 (-1.41)	-0.440 (-1.28)	-0.468 (-1.26)
Presentation Order			-1.077*** (-3.11)	-1.155*** (-3.06)
Controls	NO	NO	NO	YES
Pseudo R^2	0.04%	0.97%	5.64%	14.00%
Observations	177	177	177	177

Note: ***, **, and * indicate significance levels at the 1%, 5%, and 10% level, respectively. All significance levels are two-tailed. Table S7 shows analyses of logistic regressions of *Easy Task Prioritization* on *Accountability*. Table S7 shows a logistic regression with *Easy Task Prioritization* as dependent variable. This variable takes the value “1” if a participant prioritized the easy task and takes the value “0” if a participant prioritized the difficult task. *Accountability* is measured using one item in the post-experimental questionnaire. More specifically, we asked participants to evaluate the statement “*during the audit engagement, I felt accountable to the audit team leader*” on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). “*neither agree nor disagree*” is the midpoint of the scale. *Psychological Ownership* is a dummy variable that equals one if the participant was in the 'Enhanced Psychological Ownership' treatment and zero if the participant was in the 'Limited Psychological Ownership' treatment. *Presentation Order* is a dummy variable that equals one if the difficult task was presented on the left and zero if the easy task was presented on the left when participants had to make a choice. Control variables consist of *Time Pressure* (a dummy that takes the value “1” [“0”] if participants are in the higher [lower] time pressure condition), age, gender work experience, and a dummy indicating “1” if the participant works for a Big 4 firm and “0”, a three-item Need for Cognition scale (adapted from Cacioppo and Petty 1982), a three-item Work Engagement scale (based on Schaufeli et al. 2002), a three-item Priority of Audit Quality scale (based on Katz-Navon, Naveh, and Stern 2005) and the Ten-Item Personality Inventory (TIPI) consisting of the Big Five traits: extraversion, agreeableness, conscientiousness, emotional stability, and openness to new experiences (Gosling, Rentfrow, and Swann Jr. 2003).