# ACCOUNTABILITY IN LABOR PLATFORMS

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# A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

Human Resources and Labor Relations - Doctor of Philosophy

# ABSTRACT

Accountability is a requisite for social order; without it, chaos would ensue. Within all organizations, accountability keeps employees on the straight and narrow by ensuring that they follow orders and act in line with the interests of the collective. In traditional organizations, accountability is administered by bosses and coworkers. By contrast, labor platforms (e.g., Uber, Upwork, Fiverr, MTurk) have no bosses or coworkers, and instead rely on customers and technological innovations to hold workers accountable. While differences in accountability systems between traditional organizations and labor platforms have been discussed, what has been left unexamined are differences in workers' felt accountability that result from these different accountability systems. This distinction is important, as it is ultimately a worker's felt accountability which guides their actions. As such, this dissertation seeks to fill the void in the extant research by examining how organization type (traditional vs. labor platform) influences the accountability experienced by workers.

First, a targeted review of the relevant accountability research over the past 40 years is performed, with an eye on the relationship between accountability systems and felt accountability. Next, an overview of relevant labor platforms literature is provided. The overview starts with a description of labor platforms and moves to a description of the lived work realities of platform workers. Then, features of the accountability environment are used to generate relevant hypotheses. Next, the dissertation's methods including samples and measures used are discussed, and results of the study are described. It was theorized that differences between the accountability systems of labor platforms and traditional organizations would result in theoretically equivalent differences in workers' felt accountability. Features of the accountability environment were measured phenomenologically to test these hypotheses. Specifically, it was predicted that platform workers would have less accountability intensity, more outcome accountability, less process accountability, and less accountability salience than traditional workers. However, largely contrary to these expectations, a pattern emerged of platform workers having more felt accountability in most instances, especially when controlling for task characteristics (skill variety and reciprocal interdependence). Finally, future research directions are discussed. Copyright by JACOB MCCARTNEY 2022 For my dad Fred, who loves education almost as much as he loves me.

# ACKNOWLEDGEMENTS

It takes a village to raise a child; I am extremely grateful for the help I have received. I could not have completed this dissertation without the assistance of many individuals including my committee, the fantastic support staff at HRLR, my classmates, my family, and all of my teachers, preschool through PhD, who were as enthusiastic about teaching as I was about learning. However, at the risk of being too abrupt, there are two people that I want to thank in particular.

My wife, Ashley Morrison, has been a comfort in tough times, and more importantly she has been my best friend. Despite the difficulty of the dissertating process she rarely complained, and never once made me feel silly for pursuing my dreams. Without her, this dissertation would not be possible.

My advisor, Angela Hall, has been incredibly supportive. While COVID put an end to our hallway talks, in her, I had someone who always had my best interests at heart. She taught me not only about accountability and how to succeed in academia, she shimmered as an example of caring in action. I look forward to my continued partnership and friendship with her, knowing that the best way to pay it back is to pay it forward.

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# **INTRODUCTION**

This dissertation examines accountability within a new organizational form: namely, labor platforms. Labor platforms (e.g., Uber, Lyft, Upwork, MTurk, TaskRabbit) are marketplaces powered by apps and websites, where consumers are offered services from multiple, ostensibly independent, workers. In order for labor platforms to operate, platform workers (workers that provide services through labor platforms) must be accountable for their work, as accountability is necessary for the operation of any enterprise (Frink & Klimoski, 1998). Specifically, without accountability, individuals would be able to disregard consequences imposed by others (i.e., to shirk their work responsibilities) or perform work in any manner they deem feasible or expedient (Mitchell, et al., 1998).

Systems which hold workers accountable (accountability systems) on labor platforms differ significantly from those found in traditional organizations. For instance, whereas accountability is enforced in traditional organizations by stakeholders and salient audiences (such as bosses and teammates), there are no bosses or teammates on labor platforms. Instead, platform workers are held accountable by customers and by the platforms through which they work.

The current body of research, including work on algorithmic management (Rosenblat & Stark, 2016; Wood et al., 2019), although not grounded in the accountability literature, has fundamentally examined how accountability systems within labor platforms operate and how they differ from those found in traditional organizations. However, the current body of research has failed to examine how these differing accountability systems result in felt accountability. This distinction is key, because it is ultimately an individual's felt accountability which influences their behaviors and attitudes in the workplace (Lewin, 1936; Frink & Klimoski, 1998).

The main objectives of this dissertation are to examine whether, and to what extent, differing accountability systems within labor platforms result in differing felt accountability states. This dissertation begins with a literature review on accountability. The focus of the literature review is to provide foundational knowledge on felt accountability and to discuss the linkages between accountability systems and felt accountability. This review will prominently include an examination of the mediating role of the accountability environment, with particular emphasis on process and outcome accountability. Next, an examination of accountability systems within labor platforms is conducted. This dissertation then presents hypotheses surrounding the differences between traditional work and labor platforms. Next, the study designed to test these hypotheses is described. Finally, results of the study and a discussion including suggestions for future research are presented.

# **CHAPTER 1: ACCOUNTABILITY**

### 1.1 From Accountability Systems to Felt Accountability

Accountability is a requisite for social order in both complex and simple organizations (Frink & Klimoski, 1998). On its own, this fact is not interesting; organizations cannot operate without oxygen or gravity either, yet neither of these is a topic of substantial organizational research. What makes accountability such a compelling topic to study is not just its necessity, but also the difficulty in finding the right type and balance of accountability, and the consequences that arise from getting this formula wrong.

Accountability is necessary in every workplace, because the expectation that we will need to answer for our actions is the primary force that constrains self-interested and reckless behaviors (Mitchell et al., 1998). Moreover, individuals have a need for a sense of belonging that goes beyond financial motivation (Baumeister & Leary, 1995). As such, individulas are often motivated to maintain their relationships due to their need to belong, as opposed to rationality as assumed by many researchers (Schlenker, 1980). Indeed, individuals may seek to maintain their relationships beyond the realm of material usefulness. Because individuals maintain their relationships by properly responding to their accountabilities, accountability has been described as the basic social contingency (Lerner & Tetlock, 1999) through which individuals' actions are shaped.

Accountability is substantially important; it is linked to greater job performance (Schlenker, 1985) and a decrease in illegal behavior (Mitchell et al., 1998). However, accountability is not a panacea for all "social and cognitive ills" (Lerner & Tetlock, 1999, p. 270). Imbalances in accountability are at the "core of most dysfunctional behaviors" (Schlenker,

Weigold, Doherty, 1991, p. 96) and, as such, the oft-believed view that the only solution to problems with accountability is more accountability is wrong (Dubnick, 2005).

While accountability provides direction to an individual, the signals from accountability can become too strong. Curvilinear relationships between accountability and outcome variables have been theorized about (Ammeter et al., 2004; Frink et al., 2008; Hall et al., 2017), wherein too much accountability leads to negative outcomes past a certain threshold. There is potential for a dark side of accountability that exists in all organizations (Frink & Klimoski, 1998), where employees become less cooperative (Adelberg & Baston, 1978) and stereotype individuals more frequently (Lerner & Tetlock, 1999). Thus, at its core, more accountability is not something that always improves a situation. Instead, accountability is a complex, multifaceted concept (Lerner & Tetlock, 1999), not a singular one that always improves work outcomes.

The objective differences in accountability that people face are often called "*accountability systems*" (Frink et al., 2008). Accountability systems include both formal systems, such as performance feedback protocols, and informal systems, such as social norms (Frink & Klimoski, 2004; Romzek & Ingraham, 2000). Accountability systems are the means by which individuals are held accountable within organizations. Accountability systems include, but are not limited to, pay, promotion, and performance evaluation (Hall et al., 2003). Accountability systems are important because they "have a large impact on how people think: they shape where people direct their attention and how they process information" (Patil et al., 2016, p. 282). Accountability systems have this power over people because "[a]ccountability for conduct is a universally accepted norm" (Ferris et al., 1995, p. 177) that guides individuals' behavior in organizations. As such, it is essential to study accountability systems if one wants to understand the impacts of norms and formal systems on work outcomes.

However, even when people are under identical objective accountability states, the manner in which those people feel and react to the accountability may differ widely. Individuals subjectively interpret an objective reality; as such, it is their interpretation of reality which guides their behavior (Lewin, 1936). Accordingly, most modern accountability research within the organizational sciences does not focus on accountability systems, but instead, on felt accountability. Felt accountability is defined as a "perceived expectation that one's decisions or actions will be evaluated by a salient audience and that rewards or sanctions are believed to be contingent on this expected evaluation" (Hall & Ferris, 2011, p. 134).

It is important to study felt accountability for two primary reasons. First, a person's subjective interpretations of accountability are important because the interpretations ultimately guide their behavior (Lewin, 1936). Thus, if we want to understand how accountability impacts individual behavior, it is necessary to understand how that individual sees their accountabilities. Second, there is substantial between-person variation that occurs when measuring felt accountability that is not present when measuring accountability systems. This is because individuals provide subjective interpretations of their accountabilities when felt accountability is measured, whereas objective measures of accountability structures do not lend themselves to measuring variation at the individual level.

The link between accountability systems and felt accountability is essential. Without accountability systems, there is no precursor from which felt accountability stems. Without felt accountability, there is no impact of accountability systems on organizational behavior. This linkage has been discussed extensively within the literature on accountability. Frink et al. (2008) showed that accountability systems are an antecedent to felt accountability. Hall and Ferris (2011) discussed that accountability exists at multiple levels (e.g., accountability systems and felt

accountability), and while the accountability systems at these levels are objective, they are subjectively interpreted by individuals. In a foundational piece on accountability, Frink and Klimoski (1998) recognized that while an individual's formal accountabilities help them set their expectations at work, it is ultimately up to that individual to interpret how to respond to their accountabilities.

However, studying accountability systems and felt accountability concurrently has not happened frequently in the accountability literature. To the extent that differences in accountability systems have been studied, they have been studied as part of laboratory experiments, or more macro-focused research, neither of which examine felt accountability. Similarly, most studies that focus on felt accountability have not operationalized accountability systems. Exceptions to this rule have focused on narrow, instead of holistic, conceptualizations of accountability systems (Dewi & Riantoputra, 2019; Hall et al., 2003). As such, while the literature on accountability systems and felt accountability overlaps significantly, the connection between these two concepts has been understudied. This overlap is important, because accountability acts "as a natural bridging construct between the individual and institutional levels of analysis" (Lerner & Tetlock, 1999, p. 256) that allows us to see the impact of formal and informal systems on individuals' thoughts and actions. Without meso-level work (e.g., Frink et al., 2008) that focuses on both accountability systems and felt accountability at the same time, there is risk of a 'black box' issue, where the linkage between the two constructs is assumed but not fully understood. An important instance of this is that the "dark side" of accountability not only occurs when there is too much accountability, but also when accountability systems do not result in felt accountability as expected (Frink & Klimoski, 1998). Research which examines how accountability systems lead to felt accountability in differing environments is needed to

prevent us from assuming that felt accountability operates similarly across these differing environments. This is especially true of environments that differ substantially and in various ways. For instance, the differing accountability systems between traditional work and more modern forms of work may lead to substantial differences in how workers experience and interpret their felt accountability.

While the linkage between accountability systems and felt accountability is often addressed directly, there is also an important mediator of this relationship: features of the accountability environment. Features of the accountability environment are "elements of the work environment that directly impact an individual's subjectively experienced accountability but are not dimensions of accountability itself" (Hall et al., 2017, p. 209). Features of the accountability environment have been theorized to be antecedents to felt accountability and resultant from accountability systems (Frink et al., 2008; Hall et al., 2007). In this dissertation, features of the accountability environment are reviewed and examined empirically.

### **1.2 Distinguishing Accountability**

Before delving into what accountability is in more detail, it is useful to discuss what accountability is not. Accountability is a more complex process than the mere presence of other people causing an increase in arousal (Zajonc, 1965), as accountability presumes that there are particular cognitions which take place within an individual that are to account for its effects (Frink & Klimoski, 1998). Additionally, while the effects of mere presence only take place in the actual presence of others, accountability effects can take place in the assumed/hypothetical presence of others, as it is the expectation that one will be evaluated that matters. Evaluation apprehension (Carver & Scheier, 1981) is a concept closely linked to accountability; however, it

is clearly a more limited concept, as accountability also includes anticipating audience reactions and the potential reward and sanction power of salient audiences (Frink & Klimoski, 1998).

Most importantly, while accountability and responsibility are highly linked, they are not one and the same. While responsibility is typically seen as internal, accountability is typically seen as an external socially-driven process (Cummings & Anton, 1990; Dose & Klimoski, 1995). Where responsibility is concerned with how an individual is guided by their own judgments and values, accountability is concerned with how an individual responds to the presumed and actual judgments of other individuals, in addition to their own personal/internal values (Frink & Klimoski, 1998).

In Schlenker's model of accountability (Schlenker et al., 1994), the responsibility triangle consists of three connections between three different nodes: identities (how one views themselves), events (unified segments for the purpose of evaluation), and prescriptions (what one should do in an event). As such, responsibility comprises the connections between a prescription and an event (it is clear what to do in a given event), a prescription and an identity (a person is bound to the event by their identity or role), and an identity and an event (a person is connected to the event, especially to the extent they have control). The model of accountability includes a responsibility triangle which is transformed into an accountability pyramid with the addition of an external evaluating agent (Schlenker et al., 1994). Thus, even though it is true that "[w]hen one is responsible for an event, one is answerable for it" (Schlenker, 1980, p. 125), this only comes into play when an external evaluating agent is observing the responsible party, according to this model.

In Schlenker et al. (1994), the researchers tested the responsibility triangle and found strong support for it. The evidence showed that questions related to the consequences of actions

and questions unrelated to the three linkages were regarded as being far less helpful in assigning responsibility than questions related to the three linkages. Additionally, this study's result suggested that responsibility is summative not additive; thus, if one of the connections is missing, responsibility is eliminated, not reduced (Schlenker et al., 1991). Another important implication of the accountability pyramid is that for an individual to be held accountable, the individual must be deemed to be responsible. More recently, Brees and Martinko examined the differences between accountability and responsibility in two pieces. In the first piece, Brees and Martinko (2015a) found that individuals saw others (compared to themselves) as more responsible for their actions, but not more accountable. Counterintuitively, they found that this gap decreased as the seriousness of the incident increased. In a follow-up piece, Brees and Martinko (2015b) defined accountability acceptance as the "propensity and degree to which individuals accept or reject responsibility for behavior/outcomes their evaluators attempt to hold them accountable for" (Brees & Martinko, 2015b, p. 64). They argued that accountability acceptance is born of individuals' attributions of responsibility and that it has important consequences that impact how one is viewed, with those high in accountability acceptance viewed more positively.

The responsibility triangle and accountability pyramid inspired substantial further research on how individuals see their accountabilities and how accountabilities differ by roles. Weingold and Schlenker (1991) found that under accountability, high-risk individuals took more risk and low-risk individuals took less risk, because they felt that others shared their preferences and responded accordingly to their perceived expectations. In doing so, Weingold and Schlenker found the responsibility triangle is subject to the influence of individual differences. As such, different people will have different notions of what it is to be responsible, and this will guide

how they respond to their accountabilities accordingly. For example, Guidice and colleagues (2013) found the evaluating structure at the top of the accountability pyramid differed between traditional organizations and family-owned firms, due to the unification of ownership and control.

The accountability pyramid has also been used as a tool to examine transfer of training in organizations. Burke and Saks (2009) argued trainees needed a clear understanding of all three linkages within the responsibility triangle to ensure that trainees maintained the knowledge from their training. Similarly, Grossman and Burke-Smalley (2018) argued that transfer of training could be increased by focusing on the responsibility triangle and providing trainees the power to pursue the linkages within the responsibility triangle.

Finally, the accountability pyramid has been used to examine failures in responsibility. O'Leary-Kelly and colleagues (2004) argued that in instances of sexual harassment, there is not a clear identity-prescription link that makes clear what individuals must do in instances of sexual harassment. This lack of role clarity reduces the effectiveness of sexual harassment reporting and adjudicating.

#### **1.3 Impression Management**

Individuals are approval seekers concerned with managing their accountabilities as a form of impression management (Tetlock, 1985). The impression that one makes to others is important, because based on these impressions, others respond accordingly, providing rewards and administering punishments (Schlenker et al., 1994). Managing accountabilities properly protects what others think of us and ultimately creates a positive self-image (Baumeister & Leary, 1995). Although the popular opinion of impression management is negative, most impression management is nothing nefarious (Schlenker, 1980). Instead, impression management

is a normal and beneficial process not only for those managing their appearances, but often for those on the targeted end of impression management as well (Schlenker, 1980). For instance, if someone was feeling grumpy at a coworker's birthday party, they may act cheerfully in order to not lose favor with their coworker. Far from being harmed by this interaction, the coworker benefits by having a more pleasant birthday party. Similarly, impression management can often come with positive motives, such as helping friends create desired impressions (Schlenker & Britt, 1999).

Importantly, individuals do not just respond to the accountability forces in their environments, but actively attempt to shape their accountabilities (Frink & Klimoski, 1998). Frink and Ferris (1998) found that accountability influenced goal setting, arguing that the desire to manage impressions was responsible for this effect. More broadly, Ammeter et al. (2004) argued that individuals use impression management techniques to influence how they are held accountable.

# **1.4 Social Contingency Model**

The social contingency model (Tetlock, 1992), later called the model of judgment and choice, argues that accountability is the "basic social contingency" that drives human social behavior. (Lerner & Tetlock, 1999; Tetlock 1983a, 1992). Beyond offering proof for this point, Tetlock showed that different types of accountability, as well as conditions for accountability, have differential impacts on individuals' thoughts and actions. While Tetlock was concerned with accountability as the social context of judgment and choice (Tetlock, 1985) most accountability research at the time took place within laboratories instead of in organizational settings (Hall & Ferris, 2011). Such laboratory studies are in contrast to bulk modern research of accountability in organizational sciences, which has more frequently taken place in actual

organizational settings with real employees. Laboratory experiments have manipulated participants' social contexts by putting them in different accountability conditions. As such, these studies do not reflect the range of accountability systems found in organizational settings, which may subsequently impact individuals' felt accountability. For instance, where laboratory studies often have distinct outcome accountability and process accountability are hard to distinguish from each other (Seidenfeld, 2001). As such, while there is much to learn from laboratory studies on accountability, researchers must be cautious in drawing a one-to-one parallel between accountability research done within laboratories and real organizational settings. This caution stems not from a lack of mundane realism, but instead from the extent to which the treatment manipulations are non-representative of real organizational phenomena (Highhouse, 2009).

Rooted in impression management, a core assumption of Tetlock's social contingency model is that individuals are intuitive politicians that seek to please the parties to which they are accountable (Bell & Tetlock, 1989; Tetlock, 1992). Individuals seek to please their constituents, because their constituents have the power to reward and punish them based on how they behave (Hall & Ferris, 2011). This is in contrast to views from an economics perspective, which hold that individuals are intuitive economists that strive to maximize their utility. It also differs from a psychological lens, which holds that individuals are intuitive psychologists that strive to fully understand their environment and calculate with precision. As such, the social contingency model argues that it is less important to individuals that they are correct and more important that they appear to be correct to the individuals to whom they are accountable. A major element of this argument is that individuals in "natural decision environments" (Tetlock, 1985, p. 297) are

always potentially answerable for their actions. As such, laboratory experiments in economics and psychology that do not have realistic portrayals of external judgment are not capturing how individuals respond to external judgment properly. More importantly, by incorrectly assuming individuals' motivations (assuming they are trying to maximize utility or be correct instead of pleasing their constituents), economists and psychologists are judging individuals based on the wrong criteria.

Accountability is prevalent in natural decision environments as a way to coordinate behavior. Because people are presumed to be responsible for their actions (Cummings & Anton, 1990; Jones & Davis, 1965; Schlenker et al., 1991), holding individuals accountable for their actions is a way to shape how individuals address their responsibilities and goals. Accountability is used to link individuals' actions to the goals of their organizations (Tetlock et al., 1989) and to coordinate actions between team members (Fandt, 1991). Importantly, the ways that individuals are held accountable differ based on their social milieus. Thus, how individuals react to their accountabilities depends on the salient audience. For instance, Tetlock (1983a) found when subjects presented their views to a liberal or conservative audience, their justifications were more liberal or conservative, respectively.

The most important distinction in audiences that Tetlock addressed is that between being held accountable by a known audience or an unknown audience. When audiences are known, and their views are known, those who are held accountable can adjust their views so that they reconcile with those of their audiences (Lerner & Tetlock, 1999). Beyond identifying obvious viewpoints, this is not possible for unknown audiences. When the views of an audience are known and the focal person is unconstrained by past positions, the focal person will typically engage in the *acceptability heuristic* by emulating the thoughts of the audience (Tetlock et al.,

1989). However, when the focal person does not know the views of the audience, the focal person will likely engage in *preemptive self-criticism*, whereby they are motivated to think in flexible and complex ways so that they will be prepared to defend their positions (Tetlock et al., 1989).

Similarly, Lerner and Tetlock (1999) focused on pre- vs. post-decisional accountability. When subjects are held accountable before they make a decision, they are more motivated to work against their biases and provide less prejudiced answers. This occurs because people do not want to appear foolish and, as such, they search for justifiable answers. However, when subjects are accountable after the fact, accountability can neither motivate subjects to work better nor encourage them reduce their biases. Tetlock and Kim (1987) explored this phenomenon and found that accountability increased complexity of thought, but only when subjects were pre-exposed to accountability. Instead, as actions cannot be changed once a decision has already been made, effort is directed to self-justification to make past decisions look favorable (*retrospective rationality*, also known as *defensive bolstering*).

One example of this phenomenon is from Tetlock (1983b). In one group, individuals were told to justify their decisions ahead of time and were first shown evidence that a defendant was guilty. After then being shown evidence that a defendant was not guilty, they were still more likely to find the defendant guilty, in line with their original decision. In contrast, another set of individuals were told to justify their decisions ahead of time and were first presented with evidence that the defendant was not guilty. After being shown evidence that the defendant was guilty, these individuals were still more likely to find them not guilty, once again in line with their first choice. Individuals that did not expect the need to justify their decisions ahead of time

had no ordering effect. This finding indicates that accountability can lock people into their choices due to the need to appear justified in their decision making.

Another example is the *sunk cost fallacy*, where individuals will consistently double down on bad choices to justify their prior decision making (Simonson & Staw, 1992). As such, if the goal of accountability is to reduce biases and increase flexible thought, accountability should be to audiences with unknown views and should be clearly announced before decisions are reached. However, an exception is that bias will increase if there is an easier answer to justify which increases bias in that direction (Simonson, 1989; Simonson & Nye, 1992). Additionally, accountability can make individuals more prone to using irrelevant data in their decision-making processes. In Tetlock and Boettger (1989, 1994) and Tetlock et al. (1996), the researchers found that accountability diluted the use of relevant information by accountable participants, because the accountable participants assumed that all information (not just diagnostic information) provided was relevant to the question at hand. Subsequently, the use of non-diagnostic information reduced decision accuracy.

Another core area of Tetlock's research focused on whether accountability alters how people think or merely what they say. For instance, if a feedback form for a diversity training seminar shows good results, is this because the individual learned about the value of diversity or because they are parroting the value of diversity so that they are not sanctioned for being bigoted? While pre-decisional accountability is said to alter how people think before a decision is made, post-decisional accountability is said not to (Lerner & Tetlock, 1999; Tetlock, 1992). This difference influences the complexity of thought that individuals have; when individuals are accountable before a decision, they engage in more integrative, complex thought. When individuals are accountable after a decision, by definition, such complex thought cannot occur.

Finally, Tetlock discussed how accountability amplifies (increases), attenuates (reduces), or has no impact on bias (Lerner & Tetlock, 1999). Accountability draws individuals' attention to what they are being held accountable for. Because what these individuals are being held accountable for can vary greatly, there is a wide range of impacts that can result from holding individuals accountable. Most importantly, pre-decisional accountability attenuates bias to an unknown audience when there was a lack of effort prior (Arkes, 1991). This reduction occurs due to the desire to not appear foolish, causing individuals to put in the effort to check their potentially biased first impressions (Lerner & Tetlock, 1994). Accountability has no impact on bias when the task requires knowledge the individual does not have; holding someone accountable for something that they have no knowledge about does not help (Lerner & Tetlock, 1999). Accountability amplifies bias when the easiest choice is also the biased choice (Simpson & Nye, 1992). This occurs because providing audiences with an acceptable answer becomes more important to individuals (Lerner & Tetlock, 1999). Accountability can also amplify bias through increasing the indiscriminate use of information when being held accountable to unknown audiences (Siegel-Jacobs & Yates, 1996; Tetlock & Boettger, 1989).

#### **1.5 Felt Accountability**

Felt accountability is defined as a "perceived expectation that one's decisions or actions will be evaluated by a salient audience and that rewards or sanctions are believed to be contingent on this expected evaluation" (Hall & Ferris, 2011, p. 134). Felt accountability is not an objective state of the external environment, but instead, an interpretation by the individual about how accountable they are (Frink & Klimoski, 1992; Hall et al., 2017). Importantly, the phenomenological view of accountability (Tetlock, 1985, 1992) argues that felt accountability is a subjective interpretation of an individual's accountabilities (Frink & Klimoski, 1992). This

interpretation is derived through individuals interpreting the objective accountability states in their social milieus (Frink et al., 2008). The phenomenological view relies heavily on individual differences (Pervin & John, 2001), as these differences result in different interpretations of the same situation. It is valuable to study felt accountability because it is ultimately an individual's interpretation of reality which guides their behavior (Lewin, 1936).

Felt accountability is particularly valuable to the study of accountability in organizational settings. Researchers rarely have the opportunity to manipulate accountability systems, such as workers' pay or institutional norms in real organizational settings (for an exception see Frink & Ferris, 1998). Natural variation in accountability systems is also lacking, as accountability systems do not vary (much) from person to person with the same role within an organization. Conversely, felt accountability, as a perceptual state of affairs (Hall et al., 2017), differs between people facing the same accountability systems, resulting in variation needed to conduct research within a single organization.

Felt accountability is necessary to ensure that workers respond to the consequences others impose on them (Mitchell et al., 1998). Accountability should lead to positive outcomes because employees want to display favorable work behaviors over unfavorable work behaviors (Schlenker, 1985) in order to gain rewards and avoid sanctions. Felt accountability has been linked to greater job satisfaction (Breaux et al., 2009; Thoms et al., 2002), greater job involvement, greater citizenship behavior, greater job competency (Hall et al., 2003), and to greater job performance (Davis et al., 2007) when coupled with high political skill (Hochwarter et al., 2007). Ironically, though, while felt accountability is necessary for the conduct of work, substantial research on this type of accountability has shown the negative consequences of too much felt accountability. In general, there is a potential for a "dark side" of accountability (Frink

& Klimoski, 1998). Higher levels of felt accountability have been linked to anxiety (Green et al., 2000), job tension and emotional exhaustion (Hall et al., 2016), and lower levels of organizational commitment and job satisfaction (Lanivich et al., 2010). Complicating matters further, accountability has often been theorized to have curvilinear relationships with outcome variables (Ammeter et al., 2004; Frink & Klimoski, 1998), with evidence supporting this for variables including job tension (Hochwarter et al., 2005; Laird et al., 2009) and job satisfaction. Felt accountability is necessary to ensure that workers are incentivized to complete tasks as requested, but at the same time, too much felt accountability can lead individuals to focus excessively on the ways that they are being rewarded and punished. In turn, this can decrease performance and lead to negative individual outcomes.

# **1.6 Accountability Systems**

Accountability systems detail to whom and for what employees are answerable (Frink & Klimoski, 2004; Lerner & Tetlock, 1999; Patil et al., 2016; Tetlock, 1985). They are important because they direct individuals' attention toward what they are being held accountable for (Patil et al., 2016; Simonson & Nye, 1992; Tetlock, 1992). As noted in the introduction, accountability systems can be formal or informal, although it is possible that these can overlap (Ammeter et al., 2004). Formal accountability systems include staffing systems, performance evaluation systems, and compensation (Hall et al., 2003). In traditional organizations, formal accountability systems are often under the purview of human resources and accounting departments. Informal accountability systems include organizational norms and cultures (Romzek & Ingraham, 2000).

# **1.6.1** Performance Appraisals

This dissertation now shifts toward a focus on performance ratings. Performance ratings are key parts of many performance evaluation systems. Performance evaluation systems are used

as official justifications to promote, compensate, reward, and discharge employees (Ferris et al., 1995). Thus, it is important that performance ratings are fair and free from bias. The accountability literature has sought to examine how holding raters accountable to different sources and in different ways influences the content of raters' assessments.

Accountability often leads raters to judge their subjects more accurately (Mero & Motowidlo, 1995). This main effect appears to occur due to the greater attention that individuals pay when there may be consequences for their actions. For instance, it was found that rating accuracy is improved when raters had to justify their ratings in writing (Mero et al., 2003) and that accountable raters spent more time looking at information sources (Martell & Crawford, 1993). However, accountability may also lead to inflated ratings. Studies have found that ratings provided to a superior were more accurate than ratings provided directly to the individual that was being rated (Harari & Rudolph, 2017; Mero et al., 2007). This occurs, in part, because raters don't just aim to provide accurate ratings; they aim additionally to please the people they are providing ratings to (Longenencker et al., 1987). While accountability only leads to inflated ratings in the instance of face-to-face feedback (Klimoki & Inks, 1990), subsequent work has found that this was not due to other forms of feedback being anonymous (Roch & McNall, 2007).

Rater accountability is also impacted by personality and culture. Organizational culture, which promotes accurate appraisals, positively affects rater accountability (Park, 2018). Raters who are more agreeable and less conscientious provide less accurate ratings (Bernardin et al., 2009; Bernardin et al., 2016). This occurs, in part, because agreeableness is more positively related to higher rating levels under conditions of high (vs. low) rater accountability, and

agreeable raters are more impacted by social cues to rate leniently, which are present under conditions of high accountability (Bernardin et al., 2016).

## **1.6.2 Formal Accountability Systems**

Formal accountability systems are the backbone which holds workers accountable. While informal norms and expectations may be the primary guide of a worker's behavior, they are open to a vast array of interpretations (Sonnenfeld, 1985). In contrast, formal accountability systems are governance structures (Dubnick, 2003) which provide clear and easily understood (Reberioux, 2007) prescriptions. Having unambiguous accountability systems is important, because lower levels of ambiguity lead to higher levels of felt accountability (Ferris et al., 1997). Where subtle social cues can often not be formalized, changes in pay, written reprimands, and being fired always are. Thus, even though formal accountability systems can be ignored, they have the apparent legitimacy of being institutionalized. Additionally, formal accountability systems may be more dominant at the macro level (Hall et al., 2004), because it allows for the measurement of basic compliance (Reberioux, 2007).

Basic compliance is a primary motive of formal accountability systems, and, more broadly, of human resource departments (Bagley & Savage, 2005). It is important to recognize, however, that more formal accountability does not always lead to better results and better governance does not always mean more accountability (Dubnick, 2011). Findings have shown that even when the addition of formal accountability systems decreases criminal behavior, it can come with undesired consequences including a reduction in pro-social behavior (Mitchell et al., 1998) and an increase in theft after the formal accountability system is removed (Rohn et al., 2003). The introduction of formal accountability systems can also backfire entirely. For example, when the labor platform Upwork introduced strict time monitoring, the outcome was lower

project success rates (Claussen et al., 2020). The addition of formal accountability systems results in less compliance and trust from workers, who are burdened with cumbersome requirements that indicate they are not to be trusted to behave ethically. Requiring workers to report their units of work reduced unethical behavior compared to requiring workers to report the cost of the overall work (Desai & Kouchaki, 2015). This occurred because reporting units increased felt accountability, potentially because it leads the worker to believe they are being monitored more closely (Desai & Kouchaki, 2015). This falls in line with the concept of reactance, where it has been proposed that too much accountability may be an overly-taxing stressor that leads to negative outcomes in the workplace (Ferris et al., 1995; Lerner & Tetlock, 1999).

Formal accountability systems are highly impacted by environmental factors (Ferris et al., 1997). Organizations base their formal accountability systems on the requirements of the external environment (Frink et al., 2008). For instance, top-down organizational control systems are dominated by top-down command and control approaches (Martin-Rios, 2015), and where this simplicity has waned, accountability systems have become more complex and more numerous (Ingram, 2004). Additionally, the advent of new technologies can lead to drastically different accountability systems (Scott & Orlikowski, 2012).

In summary, it is apparent that accountability is highly related to ethical behavior. Having accountability mechanisms in place to encourage ethical behavior is important (Beu & Buckley, 2001; Mitchell et al., 1998). However, accountability is far from a panacea to make people act more ethically (Dubnick, 2011). Instead, accountable parties must also be responsible in order for accountability to be an appropriate tool in bringing desired change (Skarlicki et al., 2017).

### **1.6.3 Informal Accountability Systems**

Research on informal accountability systems has largely been ignored within accountability research (Frink & Hall, 1998; Hall et al., 2004), despite their importance in shaping a moral climate (Beu & Buckley, 2004) and their importance in fostering felt accountability, which can deter unethical behavior in the face of ineffective formal accountability systems (Pan & Patel, 2022). Instead, research has focused more on formal accountability systems, which are more clearly defined at macro levels (Dubnick, 2003). This is problematic, because informal norms determined through accountability roles between principals and agents are perhaps the largest determinant of the effectiveness of formal accountability systems (Dose & Klimoski, 1995). Additionally, the informal accountability systems (e.g., norms and culture) of laboratories are not the same as those of real organizational settings, making the influence of informal accountability systems difficult to study in laboratories.

Informal accountability systems work well when culture is strong, intensely held, and shared by employees (Gordon & DiTomaso, 1992). For instance, accountability environments that are strong (instead of weak) put employees under greater pressure to comply (Mischel, 1977) and lead to greater felt accountability (Vesey & Ford, 2019). Limited evidence has also shown that the link between conscientiousness and felt accountability is influenced by the strength of the accountability environment, with strong accountability environments having a lesser connection between conscientiousness and felt accountability than low/weak accountability environments (Vesey, 2013). Multiple studies have shown how culture influences how, and to whom, individuals are held accountable. Leader accountability has been argued to be an informal, sociopolitical process where the reputations of leaders influence how much stakeholders trust them, instead of a formal process (Hall et al., 2004). Where the standard belief

was once that accountability always produces competitive behavior in negotiations, researchers found that accountability only produces competitive behavior where competitiveness is the norm (Gelfand & Realo, 1999). Specifically, through a cross-cultural study, it was found that cooperation was high in cultures with high collectivism when accountability was also high, but cooperation was low when accountability was low (Gelfand & Realo, 1999). The opposite was true for cultures low on collectivism, where cooperation was high when accountability was low, and cooperation was low when accountability was high (Gelfand & Realo, 1999). Further research showed that pressure to operate in a team only manifested itself when both participants were from a collectivist culture (e.g., Chinese participants; Liu et al., 2012). Another example of how accountability is culturally influenced is that where persons from India found role-related interpersonal responsibilities to be moral issues, Americans thought of them in personal terms (Miller & Luthar, 1989). Because of this tendency, it was expected and found that persons from India were more likely to absolve accountable individuals for justice breaches. Work on the accountability pyramid (Schlenker et al., 1994) found that the Protestant Work Ethic (PWE) was correlated with holding people responsible for their actions, whether or not linkages found in the responsibility triangle were present (Christopher & Schlenker, 2005), as those high in PWE felt that it was the right thing to take responsibility even when information suggesting one should take responsibility was not found in the responsibility linkages. As such, those high in PWE tended to make internal attributions (vs. placing blame on external circumstances) for the unemployment of others. Informal accountability systems also vary across national contexts.

# **1.7 Accountability Roles**

Accountability roles between principals and agents are perhaps the primary influencers of external control systems (Dose & Klimoski, 1995). As such, it is important to understand

accountability roles in order to understand how accountability is enacted. Role theory describes how individuals form and understand mutual expectations at work. Actors take two key roles in accountability episodes: the agent (or focal audience) and the principal (or audience) (Dose & Klimoski, 1995; Frink & Klimoski, 1998; Frink et al., 2008). In classic role systems theory, the expectations of the agent are interpreted by the principal to form shared role expectations (Frink & Klimoski, 1998; Katz & Kahn, 1978). These expectations can be formed through contractual obligations, but more typically are formed through implicit psychological contracts (Argyris, 1960; Erdogan et al., 2004; Schein, 1970). However, more modern research has also recognized the role of the principal in actively shaping their accountabilities (Bergstiener, 2011; Frink & Klimoski, 2004; Morrison, 1993), due to the implicit nature of psychological contracts which leads to differences in how principals and agents interpret role expectations (Rousseau, 1995). Professionals also respond to accountability demands indirectly, using them in the act of job crafting to shape their work environments (Renkema et al., 2022). Accountability roles can be characterized similarly to the formal vs. informal distinction for accountability systems (Frink et al., 2008). Analogous to formal accountability systems, when accountability roles are structured they have regularity and consistency (Dubnick, 2003; Dubnick & Justice, 2006). Analogous to informal accountability systems, when accountability roles are emergent there are no clear rules that bind principal and agent (Dubnick, 2003).

Accountability is at the center of coordination and integration; without the binding of accountability, social life would be tenuous, as the exchange of behavioral expectations is necessary to hold one another accountable (Cummings & Anton, 1990). It is the fundamental answer to the problem of how to coordinate among individuals who are capable of controlling their own actions (Scott & Lyman, 1968). Accountability roles bind individuals together,

allowing them to coordinate and plan around the accountabilities of others (Frink & Klimoski, 1998).

Recent work has also highlighted the role of accountability in shaping organizational citizenship behaviors (OCBs). While research on OCBs often assumes that such behaviors are solely discretionary, OCBs can be impression-enhancing, and thus self-serving (Bolino, 1999). Thus, OCBs may be influenced by the norms by which individuals help each other and reciprocate behavior in the workplace. Under obligations to reciprocate, accountability has been shown to increase OCBs (Dierdorff & Rubin, 2021). Accountability has also been found to moderate the relationship between interpersonal skills and OCBs, such that greater accountability resulted in greater OCBs (Dierdorff et al., 2021). Finally, accountability has been shown as a mediator of the relationship between team member exchange and OCBs (Dai et al., 2020). It has also been found that accountability at the group level (as opposed to accountability at the individual level) increases information exchange and group performance (Liu & McLeod, 2014). On the whole, these findings show that accountability can increase focus and performance on tasks beyond one's immediate work duties, but only when individuals are held accountable for these components of work. This suggests a positive linear relationship between accountability and OCBs. However, when individuals are under low accountability, they may have more time to devote toward OCBs (Hall & Ferris, 2011), potentially explaining why accountability has a curvilinear relationship with OCBs, wherein medium levels of accountability lead to the least OCBs.

Trust is also highly important to the topic of accountability and integration. Trust allows individuals to rely on others in the workplace to complete tasks that are necessary for their job to be completed. As such, it is an essential component in division of labor (Frink & Klimoski,

1998) in the increasingly specialized workplace. De Cremer and colleagues (2001) found that low-trusters could increase their contributions to a group task to the same levels of high-trusters but would only do so when decisions were easily identifiable to partners. Their results provided evidence that accountability could be a substitute for trust, a point also argued by Ammeter and colleagues (2004). This occurred because under high accountability, low-trusters believed that others would comply, and therefore that low-trusters would be willing to do so themselves. At the same time, they found that the interaction between trust and accountability only applied to high self-monitors, potentially because high self-monitors feel the need to conform to social standards. Similarly, De Cremer and Barker (2003) found that accountability may lead to greater cooperation, but only when individuals feel that others will abide by the norm of cooperation.

A special role worth considering is accountability for others (AFO) and informal accountability for others (IAFO), where individuals are held accountable for the actions of others. Cultural context influences when, and why one feels accountable for others (Weinryb, 2015), as do an individual's needs (Royle & Hall, 2011). AFO has been found to have linear positive relationship with job tension and a negative linear relationship with job satisfaction when perceived resources are low (Zellars et al., 2011), but the relationships are curvilinear (forming an inverted U) when perceived resources are high. This is important in that it shows that individuals may "perceive the actions of others within their sphere" (Zellars et al., 2011, p. 108) as ways in which they can be positively evaluated. Similarly, IAFO moderates the relationship between self-efficacy and career engagement (Royle et al., 2016), implying that people care about improving their social surroundings, but only care to do so when they think they can do so.

#### **1.8 Accountability & Individual Task Performance**

Ultimately, perhaps the major reason that organizational scholars care about accountability is its link with individual task performance. Accountability is "[n]ot an option for achieving and sustaining success - it's a necessity" (Samuel & Novak, 2001 p.9). Accountability is necessary for individual task performance, because without accountability individuals would not be incentivized to perform work-related duties. At the same time, accountability is at the heart of most dysfunctional behaviors in the workplace (Schlenker et al., 1991), in part, because individuals may behave unethically, give less than full cognitive effort, and engage in other counterproductive behaviors in response to their accountabilities (Hall et al., 2007). As such, accountability has a complex relationship with individual task performance in the workplace.

Under ideal circumstances, accountability should lead to better individual task performance because employees should want to display organizationally desired over undesired work behaviors when they believe that they will be held answerable (Schlenker, 1985). Accountability motivates people to perform their tasks properly (Enzele & Anderson, 1993), increases task attentiveness (Mero et al., 2006), and can lead to greater cognitive effort (Kuo et al., 2021). This stems in part from accountability causing people to take responsibility for their work outcomes (Hall et al., 2017; Li et al., 2002). However, there are also reasons that accountability should lead to worse individual task performance. Contrary to popular opinion, there can be too much accountability (Dubnick, 2005). When people are overly monitored, it can lead to boomerang effects, wherein a perceived lack of trust causes decreased motivation (Enzele & Anderson, 1993; Lerner & Tetlock, 1999). Accountability can also lead to negative outcomes when it is from an illegitimate source or otherwise seen to be unnecessary (Brehm, 1996). It can also lead individuals to take cognitive shortcuts and discourage creativity and problem-solving as individuals default to the "acceptability heuristic" (Tetlock, 1985).

On the whole, this has led to a complex series of findings and theorizing between accountability and individual task performance. Theoretically, some level of accountability must be present to incentivize individual task performance (Hochwarter et al., 2005; Lerner & Tetlock, 1999). However, theoretically, there can be too much accountability leading to a curvilinear inverted-U shaped (or other non-linear) relationship between felt accountability and individual task performance (Amneter, 2004; Frink et al., 2008). Rarely have unambiguously positive findings between felt accountability and individual task performance been found (for an exception see Li et al., 2022). Instead, accountability has been shown to have a complex relationship with individual task performance. Accountability was shown to increase work rate, but only among type A personalities (Yarnold et al., 1988). In another study, there was no direct effect of felt accountability on performance ratings, but the relationship was moderated by political skill (Hochwarter et al., 2007). Similarly, another study found no direct relationship between felt accountability and individual task performance, but found that OCBs and reputation mediated the relationship between felt accountability and individual task performance such that those who engaged in more OCBs had better reputations and subsequently had better task performance (Hall et al., 2009). To fully understand the impact that accountability has on organizational outcomes including individual performance, it is necessary to look at contextual factors, as is done in the next sections.

#### **1.9 Features of the Accountability Environment**

Features of the accountability environment influence how accountability systems result in felt accountability in different organizational contexts (Frink et al., 2008; Hall et al., 2007). For

instance, a performance management system that places emphasis on accountability for deliverables may be taken seriously in an organization that emphasizes outcome accountability, but less seriously in an organization that emphasizes process accountability. Features of the accountability environment apply to both formal and informal accountability systems (Frink et al., 2008).

The current body of literature has focused primarily on four features of the accountability environment: accountability focus, accountability source, accountability salience, and accountability intensity. Respectively, these features examine whether individuals are held accountable for outcomes and/or processes, to whom individuals are accountable, whether individuals are held accountable for important outcomes, and whether individuals are held accountable for too many things at once. They are important as mediators between accountability systems and felt accountability (Frink et al., 2008).

### **1.9.1** Accountability Source

Accountability source is "the source of an individual's felt accountability in the firm" (Hall et al., 2007, p. 407). In traditional organizations, accountability is typically assumed to formally flow from bosses to subordinates. However, individuals can be accountable to multiple sources (Carnevale, 1985; Tetlock, 1999) including coworkers, customers, and themselves (Schlenker & Weigold, 1989). In sum, individuals have a web of accountabilities (Frink & Klimoski, 1998, 2004), in which they are accountable to multiple sources and audiences in multiple ways. Importantly, even if individuals are accountable to the same sources, some sources can be more salient than others and shape individuals' behavior accordingly. Cronin and Reicher (2009) demonstrated this point. While junior and senior officers both felt accountable to
officers on the frontline and the public, junior officers felt more accountable to frontline officers, and thus supported escalating the use of force more than senior officers did during a riot.

The accountability literature has long recognized that the source to which an individual is accountable changes that individual's behavior (Hendricks & Brickman, 1974). Accountability varies more when audiences are known versus when they are unknown (Lerner & Tetlock, 1999; Pennington & Schlenker, 1999). When audiences are known, and their views are known or assumed, individuals often change their views to be in accordance with their audience (Tetlock, 1983a). In contrast, beyond guessing obvious views, it is not possible to guess the views of unknown audiences. As such, when the focal person does not know the views of the audience, the focal person will engage in preemptive self-criticism and think in flexible and complex ways to be prepared to defend their positions better (Tetlock et al., 1989). Alternatively, when the focal person does know the audience's views, they will generally engage in the acceptability heuristic, and mimic the views of their audience (Tetlock et al., 1989). This occurs because people are cognitive misers that aim to expend little effort in their task of pleasing their focal audiences (Tetlock, 1992).

Evidence from performance ratings also speaks to the impact of different accountability sources. Performance ratings are political, and while it is often argued that performance ratings should be unbiased, the reality is that individuals must live with the consequences of their ratings, which often influences how individuals rate (Longenecker et al., 1987). As mentioned before, when ratings are provided to a superior, they are more accurate than when they are provided to the individual that is being rated (Harari & Rudolph, 2017; Mero, et al., 2007). Similarly, upward and downward ratings vary in their leniency because raters try to please their audience. While it is clear that subordinates prefer high ratings, it is often unclear what is desired

in upward ratings (Tenbrick & Speer, 2022). How an individual is held accountable is also important. Performance ratings are higher when individuals expect to give face-to-face feedback instead of anonymous feedback or no feedback at all, because the raters feel more accountable to those being rated (Klimoski & Inks, 1990).

In addition to accountability roles being important in hierarchical relationships, they are also highly important in team settings. Accountability in teams is positive in that it keeps the group functioning on the same page (Baumeister et al., 2016) and engenders cooperative relationships. This is because people become more concerned with their roles than their personal welfare (Ben-Yoav & Pruitt, 1984). In psychologically safe climates, collectivism (of which group accountability is a key element) helps to reduce slacking (Deng et al., 2019). Accountability in teams increases their effectiveness, but only when necessary resources are available to the team (Srulovici & Drach-Zahavy, 2017). Accountability in teams is a dynamic emergent state, derived from interactions both with group members and external accountability sources (Kou & Stewart, 2018). This is, in part, because individuals in teams do not work in isolation (Gist et al., 1987). Instead, teammates are greatly impacted by each other's accountabilities. Because there are more individuals holding each other accountable, webs of accountabilities (Carnevale, 1985; Frink & Klimoski, 1998) in teams can be more complicated. Accountability in teams can either be imposed hierarchically or by those within the team (Barker, 1993; Rashid, 2015). Research has shown that higher accountability in teams is correlated with more integrated behaviors and leads to greater success (Fandt, 1991). Research has also found that greater accountability allows individuals to focus less on their own welfare and more on their own job (Ben-Yoav & Pruitt, 1984); as such, when tasks are interdependent, it

becomes essential to have communication (Slavin, 1988) and accountability that allows for trust and proper performance.

Finally, one can be accountable to oneself in addition to external stakeholders (Schlenker & Weigold, 1989). Self-accountability is influenced by ethics, values, and goals (Frink & Klimoski, 1998), and leads individuals to take personal ownership over issues to which they are not being held accountable by an external source (Wang et al., 2019). While self-accountability is shown to increase ethical behavior (Ghanem & Castelli, 2019a), few practical steps have been provided to increase self-accountability (Ghanem & Castelli, 2019b).

# **1.9.2** Accountability Intensity

Accountability in the workplace is stressful (Ferris et al., 1995; Hochwarter et al., 2003). Accountability works because there are important rewards and sanctions (Hall et al., 2017; Mitchell, 1993) that depend on addressing one's accountabilities successfully. This can be quite demanding on individuals not only because individuals want rewards and to be free of sanctions, but also because accountability entails higher levels of scrutiny (Lerner & Tetlock, 1999). As such, accountability is beneficial in that it draws individuals' attention to successfully meeting their accountabilities. But accountability coupled with high uncertainty can cause stress (Siegel-Jacobs & Yates, 1996) resulting in narrow attentional capacity and simplified decision processes (Skitka et al., 1996; Svenson & Maule, 1994). As excessive stressors have a host of negative consequences including cognitive, behavioral, emotional, and physical impacts (Burman & Goswami, 2018), it is important to reduce excess stress in the workplace.

Managing conflicting accountabilities is a stressor. For instance, if an individual's boss asked them to focus on the bottom line, and their boss's boss asked them to always put the customer first, it would put that individual in a situation where it is difficult to please both of the

parties to whom they are accountable. Another example is that contract and contingent workers may feel dual commitment to their primary employer and their client (George & Chattopadhyay, 2005; Liden et al., 2003). This phenomenon has been described as an individual's web of accountabilities (Frink & Klimoski, 1998, 2004), where an individual dealing with one accountability impacts their other accountabilities, often resulting in strain outcomes. Individuals must prioritize their accountabilities while relying on finite resources (Baumeister & Heatherton, 1996). This results in a balancing act (Carnevale, 1985; Green et al., 2000; Hall et al., 2016) wherein the more accountabilities that one faces, the more demands intensify (Hall et al., 2006) Hochwarter et al., 2007; Lerner & Tetlock, 1999), and the more difficult it is to manage them all (Page, 2006). As such, accountability intensity is defined as "[t]he degree to which an individual is held accountable to multiple persons and/or for multiple outcomes in the same organization" (Hall et al., 2007, p. 407). Importantly, while accountability intensity can be measured objectively, it is typically measured phenomenologically. This is in line with conservation of resources theory, which states that it is the perceived mismatch between needed and actual resources at an individual's disposal which results in stress (Hobfoll & Freedy, 1993; Wright & Hobfoll, 2004).

However, while accountability typically leads to stress, under certain circumstances and for certain individuals it does not. When felt accountability is high and autonomy is low, individuals suffer from increased job tension, job satisfaction, and emotional exhaustion (Hall et al., 2006). But, when felt accountability and autonomy are high, it has been reported that individuals have higher job satisfaction because they have the ability to proactively address their accountabilities (Hall et al., 2006). Similarly, increased self-efficacy on the job reduces the anxiety-producing effects of felt accountability on work outcomes (Royle et al., 2005). Role

ambiguity also serves as a buffer between felt accountability and organizational outcomes (organizational commitment), likely because individuals with fewer conflicts between their accountabilities perceive a greater certainty of obtaining favorable outcomes through their actions (Breland et al., 2016). Accountability also varies based on whether an individual perceives their workplace to have high levels of political activity. Typically, when both accountability and politics perceptions are high, this leads to more stress (Goodman et al., 2011), but the relationship is reversed when individuals also have high voice, because they have channels through which they can exercise control in ambiguous environments (Hochwarter et al., 2014). More broadly, this coincides with the findings that perceived control over work has the potential to reduce the dysfunctional strain outcomes of stressors (Ganster, 1989; Gonzalez-Mulé & Cockburn, 2016) and that having the ability and opportunity to influence one's workplace can reduce the negative effects of stressors on job performance (Danna & Griffin, 1999; Shin & Hur, 2022). Control over one's work provides individuals with the freedom and discretion to effectively perceive and interpret their accountabilities in non-threatening ways, thereby neutralizing the dysfunctional effects of accountability (Ganster & Schaubroeck, 1991) while keeping the positive effects of increased attention to what one is being held accountable.

Finally, personality plays a role in how individuals perceive stress. Research has reported that people high in negative affectivity (NA) have greater job tension the more felt accountability they have, but people low in NA have a curvilinear (inverted U-shape) relationship between accountability and job tension (Hochwarter et al., 2005). This coincides with research in the broader stress literature that stress (specifically eustress) can have positive consequences (Simmons & Nelson, 2007). Relatedly, whether employees view accountability as a stressor or as

a challenge to overcome influences how they approach threats in the workplace, which, in turn, influences job satisfaction and turnover intentions (Brees et al., 2020).

## **1.9.3** Accountability Focus

A major theme in accountability research is that of process accountability vs. outcome accountability, or accountability focus, as it is often termed in later years (Hall et al., 2007). Accountability typically requires one to meet certain outcomes. However, accountability can also be judged as a process where one needs to follow a certain set of steps. In process accountability, individuals are rewarded or punished based on how they follow prescribed steps instead of on whether the outcome was positive or not. While many laboratory studies in this section manipulate accountability conditions to be close to pure outcome accountability and pure process accountability, it is important to note that in organizational settings, process accountability and outcome accountability can both be substantially present (i.e., individuals are concurrently accountable for how they do work and the end results of their work). Consequently, it is often difficult to distinguish between pure process accountability and pure outcome accountability in organizational settings (Seidenfeld, 2002). For instance, surgeons are required to follow basic protocols like obtaining consent and engaging in proper hygiene, and at the same time, are measured by the mortality of their patients.

Early research into accountability focused primarily on the positives of process accountability over outcome accountability. While not the first study on the topic, Siegel-Jacobs and Yates (1996) is cited as the seminal piece on the topic. The researchers conducted three experiments to examine potential differences between the two types of accountability. They found that process accountability encouraged individuals to take more information into account when making a decision and that it was more reliable when there was outcome feedback,

whereas outcome accountability had no positive impacts in comparison to no accountability. The better outcomes from process accountability were believed to be for two primary reasons. First, following process accountability gave people a better guide for their actions. For instance, process accountability increased the use of unique measures on a balanced scorecard for performance evaluation (Libby et al., 2004). Second, due to a mismatch between one's effort and eventual outcome, outcome accountability can cause stress and higher perceived task difficulty (Verwaeren et al., 2016).

Also, unlike outcome accountability, process accountability is not thought to increase commitment to prior courses of action (Simonson & Staw, 1992), as the need to justify one's actions under outcome accountability may lead to an escalation of commitment. In line with escalation of commitment, Brtek and Motowidlo (2002) argued that outcome accountability led people to be less cooperative and less truthful with others (Adelberg & Batson, 1978) and more politically focused (Fandt & Ferris, 1990). In essence, those under outcome accountability were too concerned with how they would be held accountable to reassess the quality of their judgments, whereas those under process accountability were more confident in how they would be judged.

Process accountability is thought to be more effective because it ostensibly increases the analysis of information (Doney & Armstrong, 1995), time and effort on task (Rausch & Brauneis, 2015), energy and focus (Doney & Armstrong, 1996), attentiveness (Brtek & Motowidlo, 2002), and professional skepticism (Kim & Trotman, 2015). Here, the idea is that through following a process, there is more attention paid to one's thoughts and actions. Process accountability also increases individuals' epistemic motivation (desire to learn and know things) (De Dreu et al., 2006; Scholten et al., 2007), which in turn increases information sharing and

performance (Scholten et al., 2007), perhaps in part because process accountability leads to higher exploration of ideas (Verwaeren et al., 2016; Verwaeren & Nijstiad, 2021). On the other hand, outcome accountability has been found to decrease exploration (Verwaeren & Nijstiad, 2021). Similarly, process accountability extends the idea-generating process, whereas outcome accountability is negatively correlated with the number of unique ideas generated (Häusser et al., 2017).

The idea that process accountability has largely positive outcomes has not fallen out of vogue, but the idea that it has uniformly positive outcomes has. Critics contend that the circumstances under which accountability focus has been tested have not been realistic. Most tests of accountability focus have occurred in laboratories, where effects may be stronger than in organizational settings (Patil et al., 2017). Specifically, for process accountability, participants in laboratory studies do not know what evaluators will think is effective (Brtek & Motowidlo, 2002). This results in a situation with normative ambiguity, under which participants engage in integratively complex thinking (Tetlock, 1983a; Tetlock et al., 1989). However, in real organizational settings, employees generally know what procedures are considered to be reasonable, and, in turn, rely on these procedures, thus resulting in less complex thinking (Patil et al., 2014). This could certainly lead to significant differences in motivation. Moreover, the amount and type of accountability that organizations apply vary by task and are influenced by motives other than performance. For instance, tasks that require outside compliance may be biased toward outcome accountability due to the need to provide verifiable results to outside evaluators (Frink et al., 2008). Therefore, there may be political considerations about what type of accountability to use which are ignored when only looking at productivity. Additionally, pure process and outcome accountability are difficult to distinguish in organizational settings

(Seidenfeld, 2001), and recent research has examined the interactive impact of process accountability and outcome accountability occurring concurrently (Verwaeren & Nijstiad, 2021). Thus, while the fidelity of laboratory studies has provided valuable insight into process and outcome accountability, they do not begin to explore the full scope and consequences of accountability focus within organizational settings.

Another major criticism of process accountability is that it leads to a higher rate of conformity errors. Process accountability encourages conformity errors as individuals stick with the script, even when they recognize that it will not lead to the right outcome (Patil et al., 2016). On the other hand, outcome accountability encourages deviation errors as people under outcome accountability attempt to obtain the best outcome incorrectly (Patil et al., 2016). Similarly, process accountability reduces the "aha-effect" (finding novel solutions) among research participants (Eskenazi, 2015). Because process accountability is rules-based, it leads to a focus on analytic strategies that disrupts affective judgment and inhibits insight (Eskenazi, 2015). Or, in other words, it is harder to have unique ideas when being required to conform to rules and process accountability.

Outcome accountability can also be a good motivator compared to process accountability. In a computer simulation where information seeking was important, Skitka and colleagues (2000) found that no accountability and process accountability were worse than outcome accountability for both overall performance and decision accuracy. Where outcome accountability leads people to seek more information, process accountability already provides individuals with a solution. Thus, for circumstances in which situational awareness is important, outcome accountability is beneficial due to individuals focusing more on their environments.

Task complexity is also an important moderator of the effectiveness of accountability focus. Outcome accountability is better than process accountability at addressing dynamic, uncertain environments, as it is unclear at first glance what steps lead to a desired outcome (Chang et al., 2017). Through a cue abstraction study, de Langhe and colleagues (2011) showed that process accountability is good for simple tasks but not complex ones. When participants were required to complete elemental tasks (i.e., tasks with a clear sequence of cues) process accountability led to greater judgment quality. However, when participants were required to complete configural tasks (i.e., tasks where sequences are unclear due to interactions between cues), process accountability had no positive impact over outcome accountability. Similarly, when a causal chain (linkages tied together by cause and effect) has been provided to individuals, process accountability offers no additional value, as there is already a process in place with the causal chain. However, adding outcome accountability to a causal chain has been found to improve decision quality, as it marries the focus toward an end goal with a focus on decision quality (Dalla Via et al., 2019).

Finally, there exists additional evidence for the benefits of outcome accountability that is mixed in nature. Outcome accountability is more effective at leading individuals to decide between good choices, as there is a greater focus on the attractiveness of outcomes (Zhang & Mittal, 2005). Alternatively, process accountability is more effective at leading individuals to decide between bad choices, as there is less stress from focusing on the negative outcomes than those under outcome accountability (Zhang & Mittal, 2005). Similarly, Davis and colleagues (2007) showed that outcome accountability was better in early phases at encouraging experimentation and that process accountability, a significant drop in experimentation occurred

for individuals with a high avoidance orientation, with the opposite true of process accountability; under no accountability, there was no relationship between experimentation and avoidance orientation. This showed that process and outcome accountability have differing impacts in complex tasks based on the stage of the task. Outcome is more important at first, and process is more important once an overall goal has been set.

The varied ways in which both process and outcome accountability are a positive relative to the other suggest a third possibility, namely that both outcome and process accountability provide value. This possibility has been recognized more recently, in part due to a shift toward acknowledging felt accountability. While process accountability and outcome accountability can exist individually and without overlap as accountability states, this is difficult, if not impossible, with felt accountability. Seidenfeld (2001) argued it is often too difficult to distinguish between pure process accountability and outcome accountability in the field, and Fernandez (2016) argued mixed states of process accountability and outcome accountability are what occur in reallife settings most of the time. Patil and colleagues (2017) reported that process accountability encourages conformity errors, and outcome accountability promotes deviation errors. Similarly, Tsai and colleagues (2016) found that both process accountability and outcome accountability were linked to a higher likelihood to use high-structured interviews. Using a sample of undergraduates conducting mock interviews, Tunguz and Carnevale (2011) found that process accountability increased emotional labor in the absence of outcome accountability, because it is more exhausting to be required to achieve certain outcomes which are partially outside the control of the individual than it is to be judged solely based on displaying certain emotions during interactions. These findings show that there are complex interactions between process accountability and outcome accountability.

# **1.9.4** Accountability Salience

Accountability salience is "the degree to which an individual is held accountable for significant outcomes" (Hall et al., 2007, p. 407) in the workplace. Individuals feel that their work is meaningful to them when they work on tasks that they deem to be significant (Hackman & Oldham, 1976). As individuals are faced with a myriad of accountabilities in the workplace, it is incorrect to assume that everything workers are accountable for is equally salient to them. Instead, research has found that accountability is strengthened when people are held accountable for things that impact a broader group (Smith et al., 2007).

Authority alone is not enough for an audience to consider entities holding them accountable to be salient. Instead, authorities must be considered legitimate by those they are holding accountable to have maximum impact (Lerner & Tetlock, 1999). To be accepted, accountability must come from a legitimate source (Tyler, 1997). Accountability also must come in agreeable forms. In particular, it is noted that accountability in the form of monitoring and controlling leads individuals to rebel by reasserting their prior views (Baer et al., 1980). When CEOs sense the presence of an external evaluating body that they believe cares about their organization, it increases the CEO's felt accountability (Schillemans et al., 2021). Similarly, when coaches behave ethically, they create a context in which athletes feel more accountable, because the coaches are perceived as a legitimate audience due to their ethicalness (White & Rezania, 2019).

#### **CHAPTER 2: LABOR PLATFORMS & PLATFORM WORKERS**

# **2.1 Introduction**

The next section of this dissertation focuses on labor platforms and platform workers (the individuals who provide services through labor platforms). This dissertation argues that the work systems of platform workers are radically different than those of traditional workers, and that with this variation, there should be expected differences in the occupational experiences among these two groups. However, before discussing the experiences of platform workers, the impact of labor platforms and the control they exert (algorithmic control) must be discussed. This logic mirrors the distinctions between accountability systems and felt accountability. While it is ultimately workers' experiences that are of concern, it is necessary to understand the systems which lead to those experiences.

# **2.2 Labor Platforms**

In order to understand the consequences of labor platforms' new organizational design for platform workers, examination must begin at the labor platform itself. Generally, platforms are digital marketplaces where customers are offered goods and/or services from multiple sellers, as opposed to an online store, where individuals receive goods from a single seller. Labor platforms operate similarly, offering customers the ability to receive services from multiple independent workers, rather than offering services directly through a single organization that employs workers. As such, the basic model of a labor platform involves three parties: platform workers hosted on the labor platform, customers who contract these platform workers, and the labor platform itself (Meijerink & Keegan, 2019). It is important to note that the customer base of labor platforms includes companies, not just individuals. For instance, Fortune 500 companies use labor platforms to meet their staffing needs (Corporaal & Lehdonvirta, 2017), and in a global

survey, half of executives expected that corporate adoption of labor platforms would be a large trend moving forward (Wallenstein et al., 2019). Further, while there are three parties, it is important to note that customers and labor platforms typically hold more power than the workers who provide services (Pichault & McKeown, 2019). Theoretically, platform workers and customers both benefit from the working arrangement, with platform workers selling their labor at surplus value, and customers obtaining surplus benefit for their purchase. Labor platforms typically take a percentage of any transaction between customers and platform workers because they are mediated through the platform.

The services offered on many labor platforms are not radically different from their counterparts: a housekeeper hired through TaskRabbit provides largely the same services as a housekeeper hired from a traditional company and an Uber fundamentally offers the same ride from point A to point B that a taxi does. Similarly, platform workers hired to conduct work within organizations closely resemble workers hired through traditional staffing agencies (Brumm, 2017). Instead, the primary value that labor platforms provide is through their networks. By offering customers many potential workers who can meet their needs and by providing platform workers with an abundance of customers, labor platforms leverage network effects (Howcroft & Bergvall-Kåreborn, 2019; Pasquale, 2016) to reduce costs. These network effects and the information technology (e.g., search and user interface) that labor platforms utilize allow customers and platform workers to find each other more easily (Kenney & Zysman, 2016). Unique features of labor platforms, most notably the use of rating systems for platform workers, can also make worker selection more discerning for clients. Similarly, some labor platforms will screen out poor requesters, as Uber has done in moving to a system where drivers rate their customers as well (Kerr, 2019). Network effects such as these are the primary value

added. This enables labor platforms to charge a percentage of each transaction that theoretically could have occurred without the platform.

One consequence of labor platforms' organizational structure is that it encourages a winner-takes-all mentality. The technology behind any labor platform is easily re-creatable. However, the userbases of customers and platform workers are not. Luck and first-mover advantage are both of substantial importance in setting up a successful labor platform (Pasquale, 2016). Due to this, labor platforms are forceful in using their power to capture value (Bauwens & Kostakis, 2014) and have been accused of strategic lawlessness (Pasquale, 2016). On the one hand, this mentality encourages rewarding platform workers handsomely because there is a need to recruit them away from competition before a dominant player in the market has emerged. On the other hand, once the market has a dominant player set, there is no longer the same incentive to pay workers well.

### 2.3 Distinctions and Statistics

After discussing the basics of labor platforms' functionality, it is now possible to make distinctions between different types of labor platforms and platform workers. This is not trivial, as even the term 'platform' is up for debate (Wood & Monahan, 2019). Because there is substantial variation among how labor platforms operate, it is difficult to pin down a definition that is descriptive of all (Howcroft & Bergvall-Kåreborn, 2018).

First, it is important to distinguish between the platform economy and similar terms including the gig economy, crowdsourcing, and the precariat economy. While platform workers are members of the gig economy, workers in the gig economy also contain many others, including workers hired by traditional staffing agencies and at spot markets (e.g., day laborers). These gig workers have interpersonal interactions with coworkers and bosses in ways that

platform workers do not, and the absence of these encounters may significantly impact the lived work realities of platform workers. This, in addition to the different time frame of employment, should caution researchers from generalizing between studies of gig/contingent workers and platform workers. In fact, when studying contingent workers' attachment to their organization, scholars were concerned with a difference between 24-month and 17-month contracts (Liden et al., 2003). The need to be cognizant of time scales (Zaheer et al., 1999) must be an even stronger concern when applying theory primarily generated from samples of full-time workers to platform workers, as platform workers often have tasks that last mere minutes. What's more, with the exception of drivers, platform workers are not typically fully dependent on labor platforms for their earnings (Schor et al., 2020).

Another difference is that while platform work is new, gig work is very much not new. Not only has gig work existed for millennia (Finkin, 2015), it was the standard before employment contracts and bureaucratic structures became the norm. So, while labor platforms are a recent phenomenon, gig work has existed as a prominent form of employment for as long as work has been formally organized. It is important to note, however, that the term 'gig economy' or 'gig worker' is often applied only to platform workers and that this is a linguistic distinction which must be noted while studying this topic.

Similarly, crowdsourcing (enlisting large numbers of people to complete tasks via the internet) also includes free services such as Freecycle and Couchsurfing (Nakatsu et al., 2014). Thus, while most platform workers are crowdsourced, using crowdsourcers as a term for platform workers is too expansive. As the focus of this dissertation is on differences between platform and traditional work, it is necessary to eliminate these other forms of crowdsourcing which are not financially motivated. Finally, in addition to the platform economy being a more

neutral term than the precariat economy (Kenney & Zysman, 2016), it is more accurate, as some platform workers enjoy substantial earnings. More importantly, the gig economy is only responsible for a small percentage in the increase of alternative work arrangements (Allan et al., 2021). It is therefore inaccurate to call the platform economy the precariat economy, as it is not the primary cause for a reduction in fulltime employment.

One distinction between labor platforms and other platforms is that on labor platforms, workers perform discrete tasks. Whereas on capital platforms, individuals sell goods or rent out assets (Farrell & Greig, 2016). Examples of labor platforms include Uber, Upwork, Deliveroo, and TaskRabbit; examples of capital platforms include Airbnb, Etsy, and eBay. Practically, the distinction between the two is important. While labor platforms are typically not used as primary sources of income (Schor et al., 2020), they are more likely to be used as a significant or primary source of income than capital platforms (Farrell & Greig, 2016; Schor et al., 2020). Conceptually, the distinction is also important, because labor platforms are more likely to be substitutes for services that were once done within the boundaries of the firm, and the selling of goods may entail separate psychological processes than the selling of one's own labor.

Two important distinctions to be made within labor platforms are detailed in a two-bytwo typology by Jabagi and colleagues (2019). First, there is the distinction between virtual and in-person work. Labor platforms that entail virtual work include Upwork and MTurk. As the work requested through the platforms is done online, it can be done by workers anywhere with a steady internet connection, leading to a truly global labor pool (although on MTurk and other similar services, requesters can request workers from specific geographic locations). Labor platforms that entail in-person work, such as Uber and Taskrabbit, connect workers with service requesters for tasks that are performed in-person. This leads to a local labor force. It also ensures

that there are in-person interactions between customers and workers. Another important consequence of this distinction is labor activity. While pushes for unionization have been poor, labor activity (largely international) has played a substantial role in pressuring labor platforms. A significant advantage in the battle to exert labor rights for in-person work is that workers are able to meet up in person and communicate with each other. As platform workers are not considered employees and they work in a geographically dispersed matter, the fragmentation of their labor is hard to overcome (Finkin, 2015). However, examples of labor activity organized in a Boston parking lot (Robinson, 2017) and through mutual aid societies in Indonesia (Ford & Honan, 2019) show that the importance of being in-person is substantial. Alternatively, there have been no serious unionization movements in virtual platforms, where the inability to communicate with other workers may be the greatest barrier. For instance, Turkopticon is an online service which bands together MTurk workers together (Irani & Silberman, 2013). However, while Turkopticon has been useful in helping MTurkers (MTurk workers) avoid untrustworthy tasks and share information, it has not been able to reach a large enough share of MTurk's workforce to put itself in a place to collectively bargain for rights. It is important to note that platform workers express their collective voice in ways beyond unionization; workers resist the control placed upon them by algorithms through engaging in 'algoactivism.' Algoactivism consists of individual or collective action where platform workers use and manipulate algorithms in their favor (Kellogg et al., 2020). For instance, a coordinated manipulation of the DoorDash algorithm was conducted by DoorDashers to collectively receive better pay by declining poorly paying deliveries (Jin et al., 2020).

The other distinction in Jabagi et al., (2019) is between high-skill and low-skill work. Here, skill refers not to how much someone is paid, but rather, the amount of training required to

have developed the skills needed to complete the task and the rarity of those skills. The majority of work in labor platforms is low-skilled. This is especially true for in-person work, which is dominated by driving and also includes tasks that theoretically almost anyone could do (e.g., standing in line for a concert). For virtual work, there is also an abundance of low-skilled tasks, including taking surveys on MTurk and other platforms. However, as virtual work taps into a truly global labor supply, it is (relative to in-person work) biased toward high- skill work. For instance, Fortune 500 companies make use of virtual platform workers in areas including software development, data science, and content marketing (Corporaal & Lehdonvirta, 2017). This type of easy-to-scale, cheap-to-start labor reduces traditional barriers to hiring, including geographic location.

Middle-skilled work is notably missing from Jabagi's typology. Middle-skilled work, such as machine operation, is typically routine (Chen et al., 2019). Middle-skilled work has increasingly declined due to the ease with which it is automated (Acemoglu & Restrepo, 2022; Autor & Dorn, 2013). Training is a typical pathway to middle-skilled jobs (Rothwell, 2015). However, by design, labor platforms do not provide much (if any) training to their workers (Fisher & Connelly, 2017), as low tenure within the firm makes the training not worthwhile to provide. While not enough to determine independent contractor status alone, training also undercuts labor platforms' argument that platform workers are independent contractors (Aloisi, 2015; Bhuiyan, 2015; Frenken et al., 2020). For instance, a study prior to the rise of labor platforms in the transportation industry found that training not required by law indicated company control over drivers (Seymour, 2008). This is but one part of labor platforms' broader operating strategy of disavowing and shifting the responsibilities of human resource management to others (Kuhn et al., 2021), also termed the "retreat from control" (Schor et al., 2020). As such,

middle-skilled work sharpened by organizational knowledge is difficult to form and is rarely hosted on labor platforms.

This picture tracks with data on the total market size of companies in the platform economy globally, with estimates rising from \$4.3 trillion in 2016 (Evans & Gawer, 2016) to \$7.2 trillion in 2018 (Fijneman et al., 2018). Importantly, the data show that growth in labor platforms has been driven almost entirely by the transportation sector, which comprises almost two-thirds of the sample which generated income from labor platforms (Farrell et al., 2018) and overtook cabs as the majority provider of ride-hailing trips as of at latest 2019 (Hagan, 2019). The dominance of the ride-hailing sector may speak toward the eventual slowing of labor platforms' growth, as there is no guarantee to be another growth sector once (and if) traditional taxi and food delivery services are entirely taken over. The Chase Institute's analysis of labor platform size coincides with other estimates (Harris & Krueger 2015, Steinmetz, 2016), providing it with credibility.

It is also worth noting Census data on the topic, and why such data are not the definitive source on the matter. The 2017 Census data release on contingent workers was the first since 2005. It was also the first data release by the Census to examine the prevalence of platform workers, which it calls 'electronically mediated work.' While estimates were initially higher, revisions to questions resulted in an estimate that electronically mediated workers accounted for 1.0% of total employment in May 2017. However, this was derived from four questions which were put together quickly under deadline pressure (Current Population Survey, 2018). The survey also suffered from issues of self and other report: just as researchers have issues defining the platform economy, so do those working in it, and the self-reported data may therefore not be the most accurate.

Other estimates of employment size in the platform economy are often substantially higher. In 2017, 4% of people in the United Kingdom were said to have participated in the gig economy in the past year (CIPD, 2017), and 13% of Australians were measured as having worked on a digital platform at some point in their lives (McDonald et al., 2019). In a 2016 survey by Pew Research, 8% of Americans responded 'yes' to having participated in gig work. These numbers are in sharp contrast to both the Chase Institute data (1.7% in 2020) and data from US tax returns, which indicated that there were 1.9 million workers (1.2% in 2016) in the online platform economy (Collins et al., 2019). The composition of the online platform economy is also contested; in contrast to the Chase data, which showed that the majority of platform workers work in the transportation industry (Farrell et al., 2018), the Pew survey showed the plurality of gig workers completed tasks online, such as taking surveys and doing data entry. This is but one example of how estimates of the platform economy differ substantially both in their eventual estimates and the population performing the work in their estimates.

### 2.4 Platform Worker Classification

There has been substantial debate over whether platform workers should be classified as employees or as independent contractors. This debate has played out politically, legally, academically, and in practice. This debate is complicated, owing to the many jurisdictions in which labor platforms operate, and because there are substantial differences among labor platforms. The majority of platform workers, especially in the United States, are classified as independent contractors. One definition of platform work goes so far as defining labor platforms as firms that use independent contractors to fulfill short-term service needs (Kuhn & Maleki, 2017). However, as discussed below in greater detail, in recent years, companies including Uber have been compelled in many jurisdictions to classify platform workers as employees.

Fundamentally, this classification has not led to substantial differences in how services are delivered on labor platforms. As such, it is outdated to assume that platform workers are necessarily independent contractors.

Typically, labor platforms classify platform workers as independent contractors in order to avoid the costs and responsibilities of employment (Collier et al., 2017; Fabo et al., 2017), mirroring broader classification trends in the economy (Alexander, 2016). While there are no estimates of how prevalent misclassification is within labor platforms, old estimates from the Department of Labor show that up to 30% of employers misclassify some workers as independent contractors (Planmatics, 2000). However, it is important to note that not all labor platforms classify platform workers as independent contractors. For instance, Instawork (a flexible staffing company) allows workers to decide if they want to be classified as employees or independent contractors (Kuhn et al., 2021). Similarly, Upwork has billing options under its Upwork payroll service for workers whom corporate employers deem necessary to classify as employees. The ability to classify platform workers as employees is increasingly important, given that platform workers from companies like Upwork can often work alongside employees, performing tasks in ways that make them indistinguishable from traditional employees. Beyond meeting legal requirements, labor platforms may classify platform workers as employees, because there is evidence that doing so leads to lower turnover rates (Ravenelle, 2017).

The debate over misclassification centers around two main components: whether platform workers are central to the labor platform's operations, and whether labor platforms exert substantial control over the work of platform workers. Traditionally, independent contractors provided services that fell outside the core competencies of an organization and that were short-term in nature (Prince, 2021). For instance, if a law firm hired an architect to build an

expansion to their offices, the architect would likely provide their services as an independent contractor because their work is not related to the core competency of the firm and is limited in nature. Uber has famously argued that it is a technology company, not a transportation company (Bales & Woo, 2016; Doorey, 2020) and therefore, that the drivers that work on its app should be classified as independent contractors because they do not contribute to the core competency of the firm. However, the core service that Uber offers to consumers is transportation; without drivers, it would be unable to provide this service (Kaltner, 2018). This has led to courts rejecting Uber's argument that it is a transportation company (Andyoan, 2017).

The second pillar of the classification debate centers around control. Broadly speaking, independent contractors can complete their work however they see fit, whereas employees are under the control of their employers. Employers' control extends not only to what work is completed, but also to how it is completed. Legally, determining what constitutes control is a hotly contested terrain (Groff et al., 2015). In the United States alone, there are multiple legal tests (the ABC test, the Common Law agency test, and the Economic Realities test) used to determine workers' classification, all of which focus in part on employers' control over workers (Kaltner, 2018). On the one hand, labor platforms, like Uber, exert control over workers by setting ratings thresholds which drivers must maintain to stay active members of the platform (Chan, 2019). Additionally, Uber enforces standards over what cars can be used for their services, and verifies that drivers are legally eligible to drive. On the other hand, platform workers have substantially more control over their working hours than do traditional employees (Todolí-Signes, 2017) because they can choose when, and for how long, they work. However, it is important to note that through incentivization schemes, labor platforms exert some control over platform workers' working hours (Oppegaard 2021; Wu et al., 2019). It is clear that

workers' control is not trivial, as greater control is one reason why platform workers are attracted to this type of work arrangement (Rosenblat & Hwang, 2016).

The opposing forces of centrality and control have led to conflicting classification results. Academics have noted the unclarity of current labor law in providing a guide for the classification of platform workers. Where some academics have argued that platform workers should be classified as employees (Collier et al., 2017; Harris, 2017), others have argued for the need of a third classification (Enwukwe, 2021; Harris & Krueger, 2015; Todolí-Signes, 2017), including the possibility that the franchise business model could be applied to platform workers (Kurin, 2016; Malin, 2018). In practice, little headwind has been made in creating a third classification scheme in the United States. Moreover, there have been problems observed with third classification systems in other countries. For instance, in Italy, a third classification was created of quasi-subordinate workers (Cherry, 2017; Cherry & Aloisi, 2016). Troublingly, this third classification led to even less rights for workers, as employers used the new classification system to classify what were once employees as quasi-subordinate workers (Cherry, 2017; Cherry & Aloisi, 2016). Conversely, a third classification system in Canada helped expand workers' rights in conjunction with an expanded definition of what an employee is (Cherry & Aloisi, 2016).

Instead of focusing on a third classification, the primary battle has been between classifying platform workers as employees or as independent contractors. In the United States, efforts to classify platform workers as employees have been largely unsuccessful. This is in part driven by public sentiment. A recent survey showed that 62% of Americans were in favor of classifying ride-hailing drivers as independent contractors. Moreover, the survey showed that 65% of ride-hailing drivers see themselves as independent contractors, while only 28% see

themselves as employees (Anderson et al., 2021). In California, the AB5 bill led to the adoption of the ABC test for classifying whether platform workers are employees or independent contractors (Brown, 2020). The ABC test requires that the hiring entity establishes three conditions for workers to be classified as independent contractors: A, that the worker is free from control; B, that the worker conducts work outside the scope of the business's usual activities; and C, that the worker is established in the trade they are performing for the business (Burdick, 2019). If, despite the claims of Uber and other labor platforms, platform workers perform work that falls within the scope of labor platforms' usual activities (point B), the ABC test would have led to the classification of nearly all platform workers as employees (Gilliand III, 2022). In response to AB5 and spearheaded by record funding from labor platforms (Levine, 2020), California voters passed ballot initiative Proposition 22, which essentially excepted platform workers from being classified as employees. However, in part because ballot initiatives must be limited to a single issue in California, the ballot initiative was found unconstitutional under California state law (Siddiqui, 2021). This ruling is being appealed (Cutler, 2022). Similarly, a ballot initiative in Massachusetts that would have classified ride-share drivers as independent contractors was rejected due to the inclusion of unrelated language that would reduce labor platforms' liability for drivers' accidents (Raymond, 2022). Despite these challenges, labor platforms have had some success in classifying platform workers as independent contractors at the state level. Washington State recently passed a law which expanded ride-share drivers' access to rights including sick pay and minimum payment guarantees. However, this policy also enshrined their classification as independent contractors into law (Marshall, 2022). Similarly, in a host of "red voting states" (i.e., Republican/conservative leaning states), marketplace contractor laws have been passed specifically for the purpose of classifying platform workers as

independent contractors (Prince, 2021). These laws were initially authored by Handy Inc. (a labor platform which pairs handymen with customers), mirroring a broader trend of labor platform involvement in legislating the classification issue (Prince, 2021).

The ABC test has also been prominent at the national level in the United States. The Biden administration signaled support of legislation implementing the ABC test nationwide (Wang, 2021) after reversing federal regulation enacted by the Trump administration, which imposed an academic reality test to determine if workers should be classified as employees (Malafi, 2021). In its place, the preexisting six-factor balancing test based on Supreme Court precedence is used to determine platform workers' classification.

Internationally, the classification of platform workers faces similar issues. For instance, Enwukwe (2021) argued for the need of a third "independent employee" classification for gig workers in Nigeria. Countries including Germany, The United Kingdom, Spain, Italy, and Canada recognize a third classification in between employee and independent contractor (Cherry & Aloisi, 2016; Jeong, 2021). However they often have ruled that platform workers are employees in their three-classification system (Jeong, 2021). This coincides with a general pattern that outside of the United States, and especially in Europe, labor platforms' efforts to classify platform workers as independent contractors have been less successful. In France, it was ruled that Uber drivers will be classified as employees (Männis, 2020), in part based on rulings from the European Court of Justice that Uber is a transportation company, not a technology company. Similarly, the Supreme Court of the United Kingdom ruled against Uber, finding that its ride-share drivers should be classified as employees, in part due to their inability to use entrepreneurial skill in improving their economic well-being (Lomas, 2021). On regulatory issues other than the classification of platform workers, Uber failed to change existing laws in

the Netherlands due to their highly institutionalized nature (Pelzer et al., 2019). The proliferation of labor platforms' new working relationships has also presented challenges for the classification of platform workers in China (Wang & Cooke, 2021; Xiao, 2019). In exactly half of 110 cases, Chinese courts ruled that labor platforms have a labor relationship with their workers (Xiao, 2019). This piecemeal protection of workers is furthered by China's ineffective labor law enforcement (Cooney, 2007; Wang & Cooke, 2021), pointing towards the need for a more unified policy.

## 2.5 Algorithmic Management

This dissertation now turns to a discussion of the unique ways that labor platforms manage their workers. Algorithmic management (also called algorithmic control; Rosenblat & Stark, 2016; Wood et al., 2019) consists of unique ways that the operators of labor platforms ensure they maintain control of workers' actions despite the absence of a command structure or traditional managerial relationships. Algorithmic management consists of control systems that automate processes traditionally under the purview of HR and human managers (Kuhn et al., 2021). At its core, algorithmic management is the automation of traditional managerial processes aided by substantial data collection and calculated by algorithms (Duggan et al., 2020; Möhlmann et al., 2021). Importantly, the algorithms powering this type of management are prescriptive; that is, they move beyond merely providing data to human decision makers. Instead, the "decisions" reached by the algorithms are the final determinant in exercising control over workers (Newlands, 2021). Prescriptive decisions are essential to the business model of labor platforms. It is far cheaper to utilize algorithmic management than to hire workers to complete the same tasks (Kuhn et al., 2021). This lack of human supervision, however, comes at a cost to workers who face poor protection (Vandaele, 2018) and have no one within the organization

advocating directly for their needs (Gilber et al., 2011). In line with the notion that algorithmic management consists of control systems, algorithmic management systems are formal systems of accountability that aim to induce felt accountability in platform workers through rewards and sanctions.

The primary means of control is a multi-pronged twist on the ultimate workplace sanction: separation from work (which in the context of traditional workers would amount to being fired). Separation from work on labor platforms differs from traditional firing in two key ways. First, separation is often automated based on performance ratings (Chan, 2019). Second, instead of being discharged, platform workers are deactivated (Chan, 2019; Ravenelle 2019), because they are not classified as employees (Bales & Woo, 2017). Other facets of algorithmic management include adjusting worker pay (Rosenblat, 2019), determining who has access to the marketplace provided through their apps (Jarrahi & Sutherland, 2019; Meijerink et al., 2021), and incentivizing workers through soft control (Rosenblat & Stark, 2016).

As suggested above, in-person labor platforms argue that they do not fire; they only deactivate workers from the platform once they reach a low enough rating (Huet, 2015). Labor platforms argue this is a meaningful distinction, as workers are deactivated based on customer ratings, not the unique judgment of individuals working for the labor platform. However, labor platforms' language stating a lack of managerial control has been criticized as part of an attempt to encourage independent contracting. If nothing else, labor platforms are the entities that set the ratings threshold (e.g., 4.6 out of 5.0 stars) for deactivation (Athey et al., 2019), indicating their control over who becomes deactivated. Virtual work is different. As the customer typically chooses their worker(s) instead of being automatically paired with them, there is no need to kick people off the platform with low ratings. Instead, individuals with low ratings are simply chosen

less (Wood et al., 2019), which provides a powerful incentive to work harder and maintain high customer ratings. Doing so enables virtual platforms to sidestep the sticky business of deactivation for poor performance.

Another key feature of algorithmic control is soft control (Rosenblat & Stark, 2016). Labor platforms do not have as great an ability to command their workers to do things, due to their desire for those workers to stay independent contractors, and due to the lack of managerial supervision. Instead, they must incentivize workers to start and complete tasks in ways that benefit the platform. A famous example is the surge zones of Uber, where drivers are financially incentivized to pick up passengers in high demand areas.

Another form of soft control is gamification (Mollick & Rothbard, 2014; Mollick & Werbach, 2015). Uber and other labor platforms have designed their apps to encourage individuals to make goals and to have a fun streamlined process (Rosenblat & Stark, 2016). Beyond ratings, badges are used on some online labor platforms, including Upwork, as a way that top users can distinguish themselves from the pack and get chosen for more work assignments (Jabagi et al., 2019). Gamification is a great fit for labor platforms as they have already made large investments in sleek, well-run apps. Additionally, labor platforms have a far greater level of knowledge about their workers' habits than traditional organizations, as they are able to collect vast amounts of data on their workers through app interactions. In total, these factors allow for the integration of engaging goals and incentives into platform workers' workflows.

Perhaps the most important element of algorithmic management is use of customer ratings. Customer ratings are the primary driver of success for a platform worker, as they entirely replace traditional performance ratings handed down by management. These performance ratings

are successful performance management tools because they can increase the amount of effort required from platform workers (Lewchuk & Clarke, 2011). They are accurate because there is little capacity to shirk individual tasks and the low social complexity of tasks makes them easy to grade. Despite overall success, there are four notable flaws with labor platforms' use of performance ratings. First, as mentioned above, while the company is not the entity giving the ratings, they are the ones that may eventually use those ratings to deactivate workers. Second, the need to maintain high ratings is constant. The worker never receives permanence in their work, and they are essentially on a permanent probationary period where they will be fired if their ratings drop (Aloisi, 2015). Third, it turns out that customers do not like being responsible for firing their service providers. This has led to a wave of "insincere five-star ratings" (Kane, 2015) and rating inflation. Customers are aware that if a 4.6 out of 5.0 average is what is needed to maintain one's place on the platform, then 4/5 is an unsatisfactory rating. This progressively leads to higher and higher ratings, rendering the overall rating structure less useful, in part because the consequences of errant and arbitrary bad ratings are more impactful. Finally, because ratings are provided by untrained customers there can be issues with sexism and racism that stem from customers' biases. (Slee, 2015). For instance, in Airbnb (a capital platform), white hosts charge 12% more than black hosts even when controlling for location and other observable factors (Edelman et al., 2014).

## **2.6 Platform Workers**

This section explores some of the consequences platform workers face given the designs of labor platforms and the algorithmic management they employ. A primary argument in favor of labor platforms is that labor platforms give workers the flexibility to work at their own pace (Hall & Krueger, 2018). Some evidence supports this view, with ride-share drivers stating that

they joined platforms for autonomy over their schedule (Rockman & Ballinger, 2017; Rosenblat & Hwang, 2016). The flexibility argument contends that it is ultimately a worker's choice when and if to work, and that this flexibility provides value to the worker.

Those more skeptical of labor platforms do not doubt the value of autonomy, but instead doubt the amount of autonomy afforded to platform workers. At the most extreme, Aloisi (2015) argued that platform-mediated work is a new form of Taylorism where work is broken down into small tasks and workers have little control over the design of their work. The tasks, because they are so small and devoid of context, have been argued to be incredibly boring (de Stefano, 2015). For instance, while taking a survey is typically not considered an engaging task, it is presumably even less engaging after an hour spent on 20 surveys through MTurk. It has also been argued that platform workers' do not have meaningful ability to choose their own work assignments due to the penalties that they face for turning down work and the power imbalance inherent to platform work, which requires workers to adhere to the interests of labor platforms (Duggan et al., 2020). However, survey evidence shows that platform workers felt comfortable choosing and changing the order of their online tasks 72% of the time (Wood et al., 2019). Thus, while tasks can be small and boring, this is clearly not analogous to Taylorism, as workers have serious autonomy over some elements of their work. For instance, while an Uber driver may be heavily incentivized to work at certain times of day and at certain locations to make more money, they are not required to do so. Or, in other words, while promises of complete autonomy have clearly been rejected by scholars (Duggan et al., 2020; Wood et al., 2019), there is still clearly substantially more autonomy over when to do work than in a traditional 9-to-5 job (Donovan et al., 2016; Schor et al., 2020), though the comparative degree of control over how to do work is less clear.

Still, there are clearly negative elements to work on labor platforms. Evidence shows that computerization intensifies work, as the automation of discipline increases the monitoring of workers (Kellogg et al., 2020). This allows gaps between tasks to shrink and the traditional schedule to break down, as work can be more easily taken home (Felstead et al., 2016; Green, 2004). Qualitative evidence has found that work intensification occurs in labor platforms (Wood et al., 2019). For instance, virtual platform workers in Africa note the incentive to work at odd hours of the day to meet global demand (Wood et al., 2019). Similarly, surveillance of platform workers is substantial. As all workflows are mediated through the app, there is considerable opportunity to monitor workers and then exploit the data to the benefit of labor platforms (Wood & Monahan, 2019). Still, it is important to recognize that labor platforms are not all-knowing, as shown through an example in the Wood et al. study. In this study, screenshots meant to check that platform workers on Upwork were on-task were easily thwarted by workers, using methods such as watching TV or having dual screens (while keeping the monitored screen on Upwork).

Due to the need to achieve high ratings, emotional labor within labor platforms can be quite high. This is especially true as the quality of the task completed is not rated on its own; customers can rate poorly for any perceived slight. On Uber, it is advised that one of the most common ways to get five stars it to have a friendly attitude (Uber, 2019), a clear request for emotional labor. This is similar to sale clerks' regulation of their checkout speeds: faster when there is a line, slower and friendlier when there is not (Sutton & Rafaeli, 1988). Uber drivers regulate often how much they speak and what music they listen to based on their customers' preferences. Not all platform workers require such emotional regulation however; online microtasks offer workers the ability to avoid the social norms of traditional workplaces (Hara & Bigham, 2017).

Perhaps the biggest issues in gig work are poor pay and a complete lack of worker protections. Even in the most precarious traditional jobs, there are some benefits and labor protections which are completely missing in labor platforms (Finkin, 2015). Platform workers are without benefits, including healthcare (De Stefano, 2015). Pay is of particular concern. Platform workers have no guarantees of future earnings; instead, increasing competition for tasks can drive wages down substantially (Boudreau & Jeppesen, 2015). While pay clearly varies by labor platform, there are many labor platforms which appear to pay substantially less than the minimum wage. MTurk pays far under the minimum wage, with workers averaging around \$2 per hour, and only 4% of MTurkers earning over the minimum wage of \$7.25 (Ellmer & Reichel, 2018). Low pay, along with the invisibility of platform workers, has led to calls for ethical guidelines for researchers using MTurk (Morrissey et al., 2019; Williamson, 2016). While rideshare companies promote earnings of \$25-\$35 per hour, these earnings do not cover insurance, gas, and traveling expenses without passengers, resulting in a true wage that is likely less than the minimum wage (Henao & Marshall, 2019). Moreover, while wages from labor platforms can be used to smooth the pay of other jobs or during times of unemployment, arbitrary reductions in pay (Cockayne, 2016) and a general lack of control make it hard to for full-time platform workers to plan their pay on a long-term basis.

Workers on labor platforms are not required to work full time, and a substantial number of these workers do not. On MTurk, workers averaged 28.4 hours: 6.6 hours of this work was unpaid work, including the search for new tasks (Berg, 2015). Evidence from the Chase Institute suggests that the majority of workers on labor platforms are not full time (Farrell et al., 2018). A contributing factor may be that it is hard to generate enough hours to be full time. Sixty percent of CrowdFlower workers and 36-38% of MTurk workers felt that there was insufficient work on

their platforms (Berg, 2015). This particularly impacts less in-demand workers who must search longer for work (Wood et al., 2019). Recognizing the differences between full and part time workers is important, because there are differences in both demographics and motivation based on the extent to which platform workers view their work as a job (Keith et al., 2019). Specifically, those that view MTurk as a job have lower personal and household income, and work more hours on MTurk than those that do not view MTurk as a job (Keith et al., 2019).

It is also worth noting demographic differences between MTurkers and the United States population as a whole. While MTurk utilizes a global workforce, it allows users to select survey respondents by country. It is therefore acceptable to look only at comparisons to a US workforce. Research has shown that MTurk closely resembles the US population on the basis of race and gender (Burnham et al., 2018). However, it is clear that MTurkers are not a random sample of American citizens, but rather, that individuals self-select onto MTurk, leading to differences in individual characteristics. For instance, MTurkers are more representative of intensive internet users than they are of the US population as a whole (Goodman & Paolacci, 2017; Paolacci & Changler, 2014) which corresponds with MTurkers suffering from greater levels of social isolation (McCredie & Morey, 2019). MTurkers also have differing educational backgrounds. Over 80% of US MTurkers have completed at least some college, making them more educated than the US workforce on the lower end of educational attainment, but only slightly over 10% have attained advanced degrees, making them slightly less educated on the higher end of educational attainment (Keith et al., 2019, U.S. Census Bureau, 2022).

Finally, an examination of the differing motivations of platform workers is warranted (McKinsey Institute, 2016). While some individuals are more motivated by a way to share their expertise or fill time within a workday, it must be acknowledged that the primary motivator for

platform workers should be presumed to be money (Deng & Joshi, 2016). This is especially true among individuals who view the platform work as a job, as they are ostensibly motivated by push factors (e.g., money) (Keith et al., 2019). Among other options in which workers can make money, flexibility and autonomy are cited as top reasons in choosing work on a labor platform. (Rosenblat & Hwang, 2016). Similar to other work when on-demand work fulfills innate psychological needs, workers develop intrinsic motivation (Rockmann & Ballinger, 2017). However, being overly monitored reduces intrinsic motivation among platform workers (Jabagi et al., 2019; Kuhn & Maleki, 2017). Additionally, as platform work is said to be very boring (de Stefano, 2016), we might expect platform work to fulfill the psychological needs of workers less often than traditional work.

## **CHAPTER 3: HYPOTHESIS DEVELOPMENT**

# **3.1 Introduction**

Accountability is at the heart of organized social life governed by rules, norms, and social practices (Weick, 1979). Individuals feel the need to properly address their accountabilities due to the punishments and rewards that flow from how their accountabilities are addressed (Frink & Klimoski, 1998; Hall et al., 2003). Without accountability, rules and guidelines are all bark and no bite, and social life becomes tenuous (Cummings & Anton, 1990).

No place is the necessity of accountability clearer than the workplace, wherein the absence of accountability, work would come to a standstill. Accountability systems from pay structures to organizational hierarchies form the backbone of the workplace that are designed to ensure that individuals feel accountable for their work and respond accordingly.

While there is extensive literature on accountability in the workplace, to date there has been no examination of accountability within labor platforms. Given that labor platforms are a relatively new form of work that utilizes a precarious workforce (Finkin, 2015), this is not surprising. However, this absence is unfortunate. The differences in accountability systems between labor platforms and traditional organizations offer a theoretical lens through which resulting differences in felt accountability and other micro-level constructs can be understood. As felt accountability has been theorized as an antecedent to important work outcomes including job performance (Davis et al., 2007), job satisfaction (Hall et al., 2006), and job tension (Hochwarter et al., 2005), it offers key insights into micro-level phenomena in the workplace. Accountability is particularly suited to this task as it is meso- and multi-level (Frink et al., 2008) and a "natural bridging construct between the individual and institutional levels of analysis" (Lerner & Tetlock, 1999, p.256). Studying accountability offers a greater level of theoretical
specification for why macro-level differences (i.e., different workplace structures) may or may not result in differences in micro-level organizational behaviors and outcomes. Accountability is a particularly useful lens through which these comparisons can be made, because it provides the framework to examine macro-level differences (accountability systems) and micro-level differences (felt accountability) concurrently. The goal of this dissertation is to make the first attempt at explaining how differences in accountability systems result in different felt accountability states for platform workers, along with examining some of the micro-level consequences of individual differences in felt accountability.

Thus, this dissertation examines features of the accountability environment (Hall et al., 2007; Frink et al., 2008). While previous literature has treated features of the accountability environment as "mechanisms to support expected behaviors" (Frink et al., 2008 p.196), this dissertation is interested in how workers' perceptions of their accountabilities flow from the objective accountability states they work under, and thus operationalizes the features of the accountability environment phenomenologically (Hall et al, 2003). Specifically, this dissertation operationalizes three features of the accountability environment (accountability intensity, accountability focus, and accountability salience) phenomenologically and seeks to examine how workers across different accountability systems feel about the scope of their accountabilities, to what extent they are held accountable for processes and outcomes, and to what extent they feel they are accountability environment as mechanisms with objective differences, this dissertation does not argue that measuring features of the accountability environment as mechanisms with objective differences, this dissertation does not argue that mirroring the connection between accountability systems

and felt accountability, features of the accountability environment have both objective states and resulting phenomenological states.

### **3.2 Environmental Factors**

While not a formal part of this dissertation's model, it is important to discuss how environmental factors influence felt accountability, because environmental factors may be responsible for differences in accountability systems between traditional organizations and labor platforms. Environmental factors are external to the organization, including laws and industry standards (Finklestein & Hambrick, 1996). Labor platforms have unique environmental factors. Because labor platforms' industries are relatively new and largely unregulated, they are ripe for strategic lawlessness (Lanamäki & Tuvikene, 2021; Pasquale, 2016). For instance, Uber developed and deployed techniques designed to identify and evade police (Issac, 2017). This strategic lawlessness is particularly valuable to labor platforms because labor platforms are winner-take-all markets where network effects are used to acquire monopolies (Bauwens & Kostakis, 2014; Lanamäki & Tuvikene, 2021). This holds relevance to how platform workers are held accountable in that, beyond the different organizational structure, it impacts the degree to which norms around employees and workers are followed. This follows Frink and Klimoski's (1998) assertion that environmental factors influence felt accountability indirectly through their impact on formal accountability systems. For instance, in a startling 2017 affair, Uber's then-CEO Travis Kalanick ended up in a shouting match about driver pay with an Uber driver who was transporting him (Watson, 2017), with the billionaire CEO yelling at the driver that "some people don't like to take responsibility". While this could be dismissed as a rogue event, it is easy to see how this event was reflective of a broader corporate culture that treated Uber drivers

as separate from the company, including Uber corporate not allowing Uber drivers to use their bathrooms (Horton, 2019).

### **3.3 Accountability Intensity**

As an objective state of the environment, accountability intensity is "[t]he degree to which an individual is held accountable to multiple persons and/or for multiple outcomes in the same organization" (Hall et al., 2007 p.407). Therefore, phenomenologically, accountability intensity is the degree to which an individual feels that they are held accountable to multiple persons and/or for multiple outcomes in the same organization. Being held accountable by multiple individuals can cause concern in organizations as it is unclear to whom one will be accountable, and therefore what actions they should take (Beu & Buckley, 2001, 2004). However, being held accountable by multiple individuals can also help to reduce immoral behavior when a corrupt individual tries to persuade one to take part in corrupt actions. For instance, being accountable to the law (as opposed to only being accountable to customers) may make it less likely for an Uber driver to break the speed limit when requested to by a rushed customer.

Social complexity is defined as "the number of differentiated relationships that individuals have" (Bergman & Beehner, 2015 p.205). Individuals in socially complex jobs should have high accountability intensity, because they are held accountable for the multitude of roles that they play in their organizations. Traditional jobs are socially complex, because they require people to hold multiple roles and take responsibility for things where roles may not yet exist. In contrast, even when performing intellectually complex tasks such as legal services (Yao, 2020), jobs on labor platforms are low in social complexity, because instead of taking on a variety of roles the platform worker is primarily within the role of a service provider. This

mirrors the lack of general complexity in work reliant on workflows, i.e., "pre-specified sets of decomposed tasks that are sequenced and integrated by computation to achieve a final goal" (Retelny et al., 2017 p.89:1).

Workers on labor platforms have no bosses and no coworkers to whom they are accountable. This is a major missed source of potential accountability intensity for platform workers. While it is true that there are strong social ties among workers on labor platforms (Gray et al., 2016) and that relational ties are highly important for obtaining new work (Ashford et al., 2018), these ties are not relevant to workflows, only to obtaining new work tasks. Strictly speaking, it is unnecessary to work with others while completing tasks on labor platforms. This should reduce the number of people that platform workers feel accountable to in the organization.

Based on the foregoing, I offer the following hypothesis:

Hypothesis 1a: Accountability intensity will be higher for traditional workers than for platform workers.

Accountability intensity is important as it relates to performance in the workplace. On the one hand, accountability intensity can be detrimental to performance. It has been theorized that accountability is detrimental when demands are beyond the capacity of an individual (Schlenker et al., 1991). Demands are more likely to be beyond the capacity of an individual when there are more demands placed upon an individual, because as demands intensify the ability to address the needs of any one audience diminishes (Page, 2006). On the other hand, the relationship between accountability intensity and performance may not be entirely negative. Accountability has often been shown to have a non-linear relationship with outcomes (Ammeter et al., 2004; Frink &

Klimoski, 1998) including politics perceptions (Breaux et al., 2009) and contextual performance (Hall & Ferris, 2011).

One reason that accountability intensity may have a positive impact on performance is that while it is obvious that workers can have too many accountabilities, it is also possible that workers can have too few accountabilities. Accountability helps to keep workers focused on the task at hand (Hall et al., 2004) because it incentivizes workers to pay attention to things for which they are rewarded and punished. In socially complex jobs, the positive impacts of accountability intensity on performance may be greater, because feeling accountable to multiple things draws individuals' attention to their accountabilities properly. In contrast, in non-socially complex jobs, an individual's attention doesn't benefit from being drawn in multiple directions.

Hypothesis 1b: The relationship between accountability intensity and performance is moderated by job type such that the relationship will be stronger for traditional workers than it will be for platform workers.

## **3.4 Accountability Focus**

As an objective state of the environment, accountability focus is defined as "[t]he degree to which individuals are held accountable for their decision processes or the outcomes of their decisions at work" (Hall et al., 2007 p. 407). Inherent to this definition are two types of accountability: process accountability and outcome accountability. Outcome accountability focuses on the achievement of end goals with little weight on how those goals are reached (Patil, et al., 2016; Siegel-Jacobs & Yates, 1996). Conversely, under process accountability, individuals are expected to follow certain steps and are required to explain how they generated outcomes whether those outcomes are successful or not (Holmstrom & Milgrom, 1991; Simonson & Staw,

1992). Phenomenologically, individuals feel outcome accountability when they feel accountable for outcomes; they feel process accountability when they feel accountable for processes.

Traditionally, process accountability was seen as being more effective. Because process accountability gives people a guide in their actions, it increases judgment accuracy (Rozelle & Baxter, 1981), decreases common rater errors (Ford & Weldon, 1981; Tetlock, 1983a), and lowers susceptibility to biases in thought (Simonson & Nye, 1992). Importantly, by providing a guide to go over one's actions it increases the thoroughness with which information is judged (Tetlock & Boettger, 1989).

Alternatively, outcome accountability was associated with negative consequences. Because people are judged by an outcome under outcome accountability, they have incentive to stick to their original plans, leading to an increased escalation of commitment (Simonson & Staw, 1992). Outcome accountability also leads to people being less truthful as they stick by their commitments (Adelberg & Banston, 1978). Moreover, the aforementioned benefits of process accountability are missing in outcome accountability.

However, more recent work has started to challenge the conclusion that outcome accountability is always harmful and process accountability always beneficial. Outcome accountability has been shown to incentivize people to challenge standard practices (Simons, 2005) and decisions rules (Tetlock & Mellers, 2011b). It has also been argued that a greater focus on outcome accountability helps to hold people accountable in ways that makes the private sector more efficient than the public sector (Lerner & Tetlock, 1999). Moreover, accountability instructions from laboratories may not incentivize people to care about the task at hand as much as real world consequences such as being fired or reprimanded do. As such, outcome accountability may be weaker in laboratory environments than in real organizational settings.

Similarly, while process accountability is great at getting people to follow a certain pattern of behavior, it can go too far at times. In order for there to be a process worth following there must be mechanisms to support that process, something which is not always the case (Retelny et al., 2017). Process accountability leads to conformity errors, errors which occur from following instructions in ways that produce harm (Patil et al., 2016). These errors are particularly common when things deviate from plan and improvisation is required to get things back on track (Patil et al., 2016). Such deviation is required at higher rates in complex and dynamic environments (Patil et al., 2016). In complex environments rules cannot be assigned with certainty ahead of time, as the changing environment makes it too difficult to predict what will happen (Hammond, 1995). Additionally, while process accountability may be beneficial for simple tasks, it may hinder the successful completion of complex tasks (De Langhe et al., 2011).

One important point from above is that the social complexity of the environment impacts the success of process accountability. Predefined plans are insufficient to describe complex goals (Suchman, 2007). Because socially complex environments are unstable, it is not possible to assign rules to those complex environments ahead of time, limiting the effectiveness of rulebased process accountability. This has led to arguments that workflows do not work for complex work and appear unlikely to do so in the future (Retelny et al., 2017). Instead, while process accountability is effective in traditional organizations, workflows are suited for simple work in stable environments where interdependencies are low (Argote, 1982).

This stands in firm contrast to traditional organizations, where employees are bound by roles, teams, and hierarchies instead of by workflows. In traditional organizations, individuals are accountable to their roles in ways that inherently mimic process accountability. For instance, in Schlenker's accountability pyramid (Schlenker & Weingold, 1989; Schlenker, et al., 1991),

responsibility is embedded within the prescription-identity link, which includes an individual's role. When someone needs to pick up slack in an organization they may know to do so by their role. That is not the case for workflows and labor platforms. If something is not working properly on a labor platform, platform workers often have no idea because they are only shown a small part of the work process. The adaptability of traditional workers is why they can be judged by process accountability. Traditional workers have the tools and the moral responsibility necessary to deviate from a pre-determined plan in ways that platform workers do not. While it has been argued that platform workers have substantial autonomy (Wood et al., 2019), ironically, this freedom may stem from the simplicity of the tasks assigned to platform workers. Platform workers may have their processes monitored less because there is no need to monitor the processes of simple work, only to ensure that it is done.

Moreover, the most standard accountability innovation in labor platforms, performance ratings, appears to be primarily a form of outcome accountability. Ratings on labor platforms are typically given after the product is delivered/service is complete instead of in the middle of a continuous relationship as is commonly the case in traditional organizations. This leaves little room to improve the process midstream. As such, while ratings can increase the effort required of platform workers (Lewchuk & Clarke, 2011), they do not offer the same path towards course correction that ratings in traditional organizations do. As such, platform workers that feel accountable to a process may not see as much improvement in performance as traditional workers do.

Hypothesis 2a: Relative to traditional workers, platform workers will experience more outcome accountability.

Hypothesis 2b: Relative to traditional workers, platform workers will experience less process accountability.

Hypothesis 2c: The relationship between process accountability and performance is moderated by job type such that the relationship will be stronger for traditional workers than it will be for platform workers.

## **3.5 Accountability Salience**

As an objective state of the environment, accountability salience is defined as "[t]he degree to which an individual is held accountable for significant outcomes" (Hall et al., 2007 p.407). Phenomenologically, individuals feel accountability salience when they feel they are accountable for significant outcomes in their organizations. Organizational scholars have long noted that individuals feel that their work is more meaningful when they work on significant tasks subsequently resulting in greater job satisfaction (Hackman & Oldham, 1976). Accountability salience adds the evaluative aspects of accountability.

There may be less accountability salience on labor platforms in the first place, because the tasks that are provided to platform workers are boring and insignificant (de Stefano, 2016). Work guided by information communication technologies has been derided as an "assembly line in the head" (Taylor & Bain, 1999) and as an electronic sweatshop (Fernie & Metcalf, 1998). While some have argued that autonomy in labor platforms is higher than in similar traditional jobs (Hall & Kruger, 2018), others have argued that this autonomy is over minute decisions (Shapiro, 2018). Unsurprisingly, individuals have lower job satisfaction in jobs that are boring (Kass et al., 2001). Additionally, because evaluators on labor platforms are often unknown, it may be expected that platform workers care less than traditional workers if their work has a substantial impact on recipients of their services.

While platform workers vary on motivation and financial status (McKinsey Institute, 2016), earning money was the most frequently chosen motivation by eLance workers (Deng & Joshi, 2016). The majority of MTurkers are motivated by pay, and this is especially the case for those who rely on MTurk as their primary income (Keith et al., 2019). On labor platforms, those who work out of necessity report lower job satisfaction (McKinsey Institute, 2016). Similarly, workers who report Uber as their only source of income are more responsive to incentive pay schemes (Wu et al., 2019). On the whole, platform workers' motivations are primarily economic (Böcker & Meelen, 2017). This may be unsurprising given the low pay of many platform workers. For instance, work on MTurk pays well under the minimum wage (Berg, 2015) and Uber reduces the earnings potential of incumbent drivers in taxi services (Berger et al., 2018).

Hypothesis 3a: Accountability salience will be higher for traditional workers than for platform workers.

Hypothesis 3b: Accountability salience has a positive relationship with job satisfaction.

Hypothesis 3c: The relationship between accountability salience and job satisfaction is moderated by job type such that the relationship will be stronger for traditional workers than it will be for platform workers.

#### **3.6 Felt Accountability**

So far, the hypotheses in this dissertation have focused on features of the accountability environment and their role in influencing work outcomes (i.e., job performance and job satisfaction). While the features of the accountability environment are tackled phenomenologically, missing to this point has been an examination of felt accountability holistically. While the accountability environment plays an important role in determining workplace behaviors, it is ultimately an individual's felt accountability which influences their

behaviors and attitudes in the workplace (Lewin, 1936). As detailed above, based on differences in their respective accountability systems, there are reasons to suspect that features of the accountability environment differ between labor platforms and traditional organizations. However, despite these potential differences in features of the accountability environment, it is unclear if there are differences in felt accountability between the organization types. (Felt) accountability is the "basic social contingency" that motivates behavior in the workplace. (Lerner & Tetlock, 1999; Tetlock, 1992). Felt accountability is necessary for organizations to effectively operate (Hochwarter et al., 2005), because individuals must be motivated to complete their work tasks. As such, to the extent that labor platforms and traditional organizations effectively operate, it stands that they both result in levels of felt accountability sufficient to incentivize performance in their workers.

However, while by definition, there are adequate levels of felt accountability within effectively-operating labor platforms and traditional organizations, it is not clear if either organization type results in more felt accountability than the minimum required to incentivize performance. Because felt accountability has been theorized as having a curvilinear relationship with performance (Ammeter et al., 2004), there are reasons to be concerned with levels of felt accountability that are too high or too low. Were felt accountability at lower-than-optimal levels, it might result in substandard performance from lackluster motivation. Felt accountability at higher-than-optimal levels might similarly result in substandard performance, because accountability is a workplace stressor (Ferris et al., 1995). As such, finding that labor platforms have differential levels of felt accountability than traditional organizations may be a first step in finding how to achieve optimal levels of felt accountability within both labor platforms and traditional organizations.

There are reasons both to expect that labor platforms would result in more and less felt accountability than traditional organizations. On the one hand, labor platforms may result in more felt accountability. The design of labor platforms emphasizes accountability through gamification (Mollick & Rothbard, 2014; Mollick & Werbach, 2015), persistent monitoring (Kellogg et al., 2020), and continual ratings that result in endless probationary periods (Aloisi, 2015). On the other hand, labor platforms lack bosses and coworkers, the primary accountability sources used to promote felt accountability in traditional organizations. As such, it remains an open question whether the innovations of labor platforms promote more or less felt accountability in their workers than the tried-and-true methods of traditional organizations.

Research Question: Do platform workers have greater levels of felt accountability than traditional workers?

## **CHAPTER 4: RESEARCH METHODS**

## 4.1 Sample & Procedure

Two samples were collected. A sample of working adults in traditional jobs was generated from a student-recruited sample (Hochwarter, 2014). Student-recruited samples have been shown to have similar demographics and lead to similar conclusions to traditional samples (Wheeler et al., 2014). Student-recruited samples are demographically diverse (Demerouti & Ripens, 2014) and, as such, are samples that are highly generalizable. Students were incentivized with extra credit to provide the surveys to working adults in traditional jobs. Traditional jobs were defined as a "full-time or part-time job working as an employee or independent contractor for a single organization for at least 10 hours per week." The data collection resulted in a sample of 136 workers in traditional jobs. Jobs from the student-generated sample were diverse in nature, and included nurses, teachers, engineers, and janitors.

A sample of MTurkers was collected using CloudResearch (Litman et al., 2017). CloudResearch is a company independent of MTurk that provides high-quality samples of MTurkers through the use of screening tools and pre-approved participant lists. Study participants were limited to the United States to ensure similarity to the student-recruited sample. The data collection resulted in a sample of 334 MTurkers.

In order to calculate the minimum sample size, G\*Power (Faul et al., 2009) was utilized. A power analysis for linear multiple regression (moderation) was run which included the following values: a medium effect size d (.5), an alpha of .05, power of .95, and 11 predictor variables. The result was a total sample size of 395 to test the hypothesis. This is the only power analysis reported, as it is the most demanding, and as such, it determines the minimum sample size for all hypotheses (Green, 1991).

The work tasks of MTurkers are substantially different than the work tasks of the studentgenerated sample in this dissertation. As such, it may be that any differences in the focal outcomes of this study between MTurkers and traditional workers are due to differences in the task characteristics of their respective jobs instead of differences in organizational structure. To defend against this possibility, this dissertation controls for skill variety and reciprocal interdependence. Skill variety has long been known to impact the experienced meaningfulness of work (Hackman & Oldham, 1976). Similarly, task interdependence has been argued to result in "responsibility for the work outcomes of others for whom one initiates work" (Kiggundu, 1981 p.503). Both skill variety and reciprocal interdependence are job resources that are responsible for the quality of jobs (Holman, 2013). The work on MTurk involves tasks low in both skill variety and reciprocal interdependence. Individuals complete simple tasks that neither require a wide range of complex skills or substantial, if any, interaction with other workers. Controlling for these variables thus allows for a comparison between work on MTurk, and work in traditional jobs with similar task characteristics.

However, the differences in task characteristics between MTurk and traditional organizations may not be coincidental. Differences in the task characteristics of labor platforms and traditional organizations may be reflective of the broader strategy of labor platforms wherein complex tasks are broken down into simple microtasks that are easily completable by a single worker. Conversely, complex tasks that cannot be broken down into simple tasks may never make their way to labor platforms, due to labor platforms' inherent inability in handling complex tasks that require substantial interdependence amongst workers (Retelny et al., 2017). This suggests that the differences in task characteristics between MTurk and traditional organizations are not an artifact that should be controlled for, but instead are key to understanding the

differences between the two organization types. As such, results are also presented without controlling for skill variety and reciprocal interdependence. Requiring that results are significant with and without controlling for task characteristics thus engenders a conservative strategy that ensures that results reflect differences between MTurk and traditional organizations 1) as they exist across a wide variety of jobs, and 2) in a sample that controls for the greater level of skill variety and teamwork of traditional jobs.

### 4.2 Measures

Felt Accountability. An eight-item unidimensional scale developed by Hochwarter and colleagues (2003). The scale utilizes a seven-point response format with strongly disagree (1) and strongly agree (7) as endpoints. A sample item is "Management holds me accountable for all of my decisions" ( $\alpha = .86$ ).

Accountability Intensity. A four-item unidimensional scale developed by Ferris (2005) as cited in Hall (2005). The scale utilizes a seven-point response format with strongly disagree (1) and strongly agree (7) as endpoints. A sample item is "The scope of people to whom I may have to answer is very broad" ( $\alpha = .87$ ).

**Process Accountability.** A four-item unidimensional process control scale developed by Sitkin & George (2005) was used as a proxy for process accountability. The scale utilizes a 5-point response format with strongly disagree (1) and strongly agree (5) as endpoints. A sample item is "There are written rules concerning many organizational activities" ( $\alpha = .84$ ).

**Outcome Accountability.** A four-item unidimensional outcome control scale developed by Jaworski and colleagues (1993) was used as a proxy for outcome accountability. The scale utilizes a five-point response format with strongly disagree (1) and strongly agree (5) as endpoints. A sample item is "Specific goals are established for my job" ( $\alpha = .84$ ).

Accountability Salience. A four-item unidimensional scale developed by Ferris (2005) as cited in Hall (2005). The scale utilizes a seven-point response format (1 = strongly disagree to 7 = strongly agree). A sample item is "The work I do, and am accountable for, is central to the overall effectiveness of my organization" ( $\alpha = .92$ ).

**Job Performance.** A nine-item unidimensional measure developed by Goodman & Svyantek (1999). The scale utilizes a five-point response format (1 = totally not applicable to 5 = totally applicable). A sample item is "Today, I achieved the objectives of my job." ( $\alpha$  = .92).

**Job Satisfaction Scale.** A five-item unidimensional measure developed by Judge and colleagues (1998). The scale utilizes a five-point response format (1 = strongly disagree to 5 = strongly agree). A sample item is "I feel fairly satisfied with my present job" ( $\alpha$  = .83).

**Positive and Negative Affect Scale (PANAS).** PANAS was included because both positive affect and negative affect have been found to impact the relationship between stress and strain (Perrewé & Spector, 2002). PANAS is measured by a bidimensional 20-item scale developed by Watson and colleagues (1988). The scale utilizes a five-point response format (1 = very slightly or not at all to 5 = extremely). Survey takers are asked to indicate to what extent they generally feel a word on average. An example for positive affect (PA) is excited ( $\alpha$  = .90), and an example for negative affect (NA) is distressed ( $\alpha$  = .93).

**Skill Variety.** A three-item unidimensional measure developed by Morris & Venkatesh, (2010). The scale utilizes a seven-point response format (1 = strongly disagree to 7 = strongly agree). A sample item is "Does your job require you to use a number of complex or high-level skills?" ( $\alpha = .77$ ).

**Reciprocal Interdependence.** A five-item unidimensional measure developed by Pearce & Gregersen (1991). The scale utilizes a five-point response format (1 = strongly disagree to 5 = strongly agree). A sample item is "I work closely with others in doing my own work" ( $\alpha$  = .90).

Additional Control Variables. Race, gender, age, and organizational tenure were each asked using a single-item question on the survey. Race, gender, age, and organizational tenure have been used as controls in prior accountability research (Royle & Hall, 2011).

## 4.3 Data Analysis Techniques

All hypotheses were tested in SPSS. Hypotheses 1a, 2a, 2b, 3a, and 3b were tested using hierarchical regression. In the first step, the control variables (race, gender, age, organizational tenure, PA, NA) were entered for all hypotheses, with sample type an additional control variable only for hypothesis 3b. In the second step, the predictor variables were entered. Hypotheses 1b, 2c, and 3c were tested using hierarchical moderated regression. In the first step, the control variables (race, gender, age, organizational tenure, PA, NA) were entered. In the second step, the predictor variables were entered, and in the third step, the interaction term was included. An incremental change in criterion variance (i.e.,  $\Delta R2$ ) in the third step indicates a significant interaction term (Cohen & Cohen, 1983). All hypotheses were tested with and without the control variables skill variety and reciprocal interdependence.

## **CHAPTER 5: RESULTS**

## **5.1 Introduction**

Chapter Four described the sample, procedure, measures and data analysis techniques used in this dissertation research. This chapter overviews characteristics of the samples and correlations between variables. It then presents the results of data analyses used to test the hypotheses proposed in Chapter Three.

## 5.2 Samples & Correlations

Evidence shows that MTurk is an effective tool for recruiting diverse participants (Mason & Suri, 2012; Loepp & Kelly, 2020). Common personality (positive affectivity and negative affectivity), demographic (age, gender, race), and organizational (organizational tenure) factors that influence accountability were used as controls. Similar control variables were used as those used in previous accountability studies such as Hall and Ferris (2011). As can be seen in Table 1, both samples drew from a diverse set of participants and are reasonably reflective of the population of American adults old enough to be part of the workforce (U.S. Bureau of Labor Statistics, 2021). As such, there is no reason to believe that differences in the samples led to skewed results.

## Table 1

Demographic Information Across Samples vs. Eligible US Workforce

Measure	MTurk	Student	US 16+
Gender (Female)	52.4%	57.1%	51.6%
Race (White)	78.5%	77.9%	77.3%

Means, standard deviations, and intercorrelations among variables are shown in Table 2.

# **Table 2**Means, Standard Deviations, and Intercorrelations Among Study Variables

Measure	Mean	Std Dev	1	2	3	4	5	6	7
1. Age	5.75	2.68	1						
2. Gender	.54	.50	.07	1					
3. Race	.78	.41	.24**	.01	1				
4. Organizational Tenure	5.44	1.87	.36**	.04	.09*	1			
5. Positive Affectivity	3.78	.80	.16**	.00	.00	.10*	1		
6. Negative Affectivity	1.94	.88	30**	.03	05	12**	20**	1	
7. Job Performance	3.92	.84	.16**	.15**	.07	.04	.41**	12*	1
8. Job Satisfaction	3.70	.82	.20**	.11*	.11*	.05	.34**	27**	.41**
9. Accountability Intensity	5.05	1.50	.12**	.13**	.05	.10*	.15**	04	.24**
10. Outcome Accountability	3.47	1.02	02	.07	10*	.01	.28**	.01	.38**
11. Process Accountability	3.66	.89	02	.08	11*	.04	.29**	07	.34**
12. Accountability Salience	4.84	1.66	.11*	.11*	.00	.16**	.32**	05	.35**
13. Felt Accountability	4.72	1.28	.02	.02	09	.12**	.31**	.01	.26**
									_
Measure	Mean	Std	8	9	10	11	12	13	
	mean	Dev	0	,	10	11	12	15	-
8. Job Satisfaction	3.70	.82	1						
9. Accountability Intensity	5.05	1.50	.19**	1					
10. Outcome Accountability	3.47	1.02	.31**	.20**	1				
11. Process Accountability	3.66	.89	.33**	.29**	.59**	1			
12. Accountability Salience	4.84	1.66	.42**	.42**	.57**	.45**	1		
13. Felt Accountability	4.72	1.28	.26**	.40**	.50**	.42**	.67**	1	_

*Note: N*=458-468

p < .05, \*\*p < .01 (2-tailed)

#### **5.3 Hypothesis Testing**

In order to test hypotheses 1a, 2a, 2b, and 3a, and the research question, hierarchical regression analysis was utilized. In the first step, the control variables race, gender, age, organizational tenure, PA, and NA were entered in all analyses. Skill variety and reciprocal interdependence were also entered in the first step for analyses that controlled for task characteristics. In the second step, the predictor variable (sample type) was included. A significant t-value of the predictor variable across both analyses indicated a robustly significant finding. Hypothesis 3b followed the same procedures, but with sample type as an additional control variable, and accountability salience as the predictor variable.

In order to test Hypotheses 1b, 2c, and 3c, hierarchical moderated regression was utilized. In the first step, the control variables were entered (race, gender, age, organizational tenure, PA, NA) in all analyses. Skill variety and reciprocal interdependence were also entered in the first step for analyses that controlled for task characteristics. In the second step, the predictor variables were entered. In the third step, the interaction term was included. A significant t-value of the interaction term across both analyses indicated a robustly significant finding.

Hypothesis 1a predicted that accountability intensity would be lower for platform workers than for traditional workers. This was significant in the opposite direction than expected while controlling for task characteristics ( $\beta = .19$ , p < .001), and insignificant while not controlling for task characteristics ( $\beta = .07$ , p = .14). Consequently, Hypothesis 1a was not supported. Tables 3 and 4 report hierarchical regression results for testing Hypothesis 1a.

Hypothesis 1b predicted that the relationship between accountability intensity and performance is moderated by job type such that the relationship would be weaker for platform workers than it would be for traditional workers. This was significant in the opposite direction

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.22	.05	.05***
Organizational Tenure	.05	.04	1.08			
Age	.07	.03	1.35			
Gender	.11	.14	2.44*			
Race	.02	.18	.32			
Positive Affectivity	.14	.09	2.92**			
Negative Affectivity	.01	.08	.29			
Step 2				.23	.05	.01
Organizational Tenure	.07	.04	1.45			
Age	.06	.03	1.18			
Gender	.12	.14	2.50*			
Race	.02	.18	.31			
Positive Affectivity	.15	.09	3.08**			
Negative Affectivity	.03	.09	.56			
MTurk Sample	.07	.17	1.50			

*Hierarchical Regression Analysis of Sample Type Predicting Accountability Intensity without Skill Variety and Reciprocal Interdependence* 

*Note.* Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other. \*p < .05, \*\*p < .01, \*\*\*p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.40	.16	.16***
Organizational Tenure	.00	.04	.08			
Age	.06	.03	1.08			
Gender	.08	.13	1.81			
Race	.02	.17	.38			
Positive Affectivity	01	.09	11			
Negative Affectivity	01	.08	24			
Skill Variety	.32	.06	6.03***			
Recp. Interdependence	.11	.07	2.06*			
Step 2				.43	.19	.03***
Organizational Tenure	.05	.04	.93			
Age	.04	.03	.86			
Gender	.09	.13	1.97*			
Race	.02	.16	.34			
Positive Affectivity	01	.09	10			
Negative Affectivity	.01	.08	.26			
Skill Variety	.31	.06	5.96***			
Recp. Interdependence	.19	.07	3.38***			
MTurk Sample	.19	.17	3.74***			

*Hierarchical Regression Analysis of Sample Type Predicting Accountability Intensity with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

p < .05, p < .01, p < .01, p < .001 (2-tailed)

than expected while controlling for task characteristics ( $\beta = .34$ , p < .05) and while not controlling for task characteristics ( $\beta = .40$ , p < .05). Consequently, Hypothesis 1b was not supported. Tables 5 and 6 report hierarchical regression results for testing Hypothesis 1b.

Hypothesis 2a predicted that relative to traditional workers, platform workers would experience more outcome accountability. This was significant in the expected direction while controlling for task characteristics ( $\beta = .13$ , p < .01), and insignificant while not controlling for task characteristics ( $\beta = .06$ , p = .21). Consequently, Hypothesis 2a was partially supported. Tables 7 and 8 report hierarchical regression results for testing Hypothesis 2a.

Hypothesis 2b predicted that relative to traditional workers, platform workers would experience less process accountability. This was significant in the opposite direction while controlling for task characteristics ( $\beta = .29$ , p < .001) and while not controlling for task characteristics ( $\beta = .15$ , p < .01). Consequently, Hypothesis 2b was not supported. Tables 9 and 10 report hierarchical regression results for testing Hypothesis 2b.

Hypothesis 2c predicted that the relationship between process accountability and performance is moderated by job type such that the relationship would be weaker for platform workers than it would be for traditional workers. This was not significant while controlling for task characteristics ( $\beta = .12$ , p = .56) and while not controlling for task characteristics ( $\beta = .05$ , p = .81). Consequently, Hypothesis 2c was not supported. Tables 11 and 12 report hierarchical regression results for testing Hypothesis 2c.

Hypothesis 3a predicted that accountability salience would be lower for platform workers than for traditional workers. This was significant in the opposite direction while controlling for task characteristics ( $\beta = .11$ , p < .01), and significant in the expected direction while not

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.46	.22	.22***
Organizational Tenure	04	.02	94			
Age	.09	.02	1.85			
Gender	.15	.07	3.64***			
Race	.05	.09	1.07			
Positive Affectivity	.41	.05	9.53***			
Negative Affectivity	01	.04	20			
Step 2				.49	.24	.03***
Organizational Tenure	06	.02	-1.29			
Age	.08	.02	1.68			
Gender	.13	.07	3.18**			
Race	.04	.09	1.02			
Positive Affectivity	.39	.05	8.87***			
Negative Affectivity	02	.04	36			
Acc Int	.17	.02	3.89***			
MTurk Sample	03	.08	63			
Step 3				.50	.25	.01*
Organizational Tenure	06	.02	-1.22			
Age	.09	.02	1.82			
Gender	.13	.07	3.00**			
Race	.03	.09	.74			
Positive Affectivity	.38	.05	8.84***			
Negative Affectivity	02	.04	39			
Acc Int	.00	.04	.03			
MTurk Sample	37	.28	-2.54*			
Acc Int X MTurk	.40	.05	2.46*			

Hierarchical Regression Analysis of Sample Type and Accountability Intensity Predicting Job Performance without Skill Variety and Reciprocal Interdependence

*Note.* Acc Int = Accountability Intensity. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.53	.28	.28***
Organizational Tenure	07	.02	-1.67			
Age	.07	.02	1.50			
Gender	.13	.07	3.23**			
Race	.05	.09	1.21			
Positive Affectivity	.31	.05	6.81***			
Negative Affectivity	03	.04	57			
Skill Variety	.25	.03	5.13***			
Recp. Interdependence	.05	.04	1.15			
Step 2				.54	.29	.01
Organizational Tenure	07	.02	-1.46			
Age	.06	.02	1.37			
Gender	.13	.07	3.11**			
Race	.05	.09	1.18			
Positive Affectivity	.31	.05	6.84***			
Negative Affectivity	02	.04	45			
Skill Variety	.22	.03	4.43***			
Recp. Interdependence	.06	.04	1.17			
Acc Int	.08	.03	1.70			
MTurk Sample	.03	.09	.71			
Step 3				.54	.30	.01*
Organizational Tenure	06	.02	-1.38			
Age	.07	.02	1.51			
Gender	.12	.07	2.97**			
Race	.04	.09	.92			
Positive Affectivity	.31	.05	6.87***			
Negative Affectivity	02	.04	47			
Skill Variety	.21	.03	4.25***			
Recp. Interdependence	.06	.04	1.17			
Acc Int	06	.04	80			
MTurk Sample	26	.27	-1.80			
Acc Int X MTurk	.34	.05	2.16*			

*Hierarchical Regression Analysis of Sample Type and Accountability Intensity Predicting Job Performance with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Acc Int = Accountability Intensity. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

p < .05, p < .01, p < .01, p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.32	.10	.10***
Organizational Tenure	.01	.03	.11			
Age	05	.02	88			
Gender	.06	.09	1.32			
Race	10	.12	-2.21*			
Positive Affectivity	.30	.06	6.58***			
Negative Affectivity	.04	.06	.93			
Step 2				.33	.11	.00
Organizational Tenure	01	.03	24			
Age	04	.02	73			
Gender	.06	.09	1.27			
Race	10	.12	-2.21*			
Positive Affectivity	.29	.06	6.37***			
Negative Affectivity	.03	.06	.67			
MTurk Sample	06	.11	-1.26			

*Hierarchical Regression Analysis of Sample Type Predicting Outcome Accountability without Skill Variety and Reciprocal Interdependence* 

*Note.* Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other. \*p < .05, \*\*p < .01, \*\*\*p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.59	.35	.35***
Organizational Tenure	09	.02	-2.01*			
Age	04	.02	86			
Gender	.02	.08	.61			
Race	10	.10	-2.40*			
Positive Affectivity	.08	.06	1.96			
Negative Affectivity	02	.05	40			
Skill Variety	.26	.03	5.79***			
Recp. Interdependence	.38	.04	8.46***			
Step 2				.60	.36	.01**
Organizational Tenure	06	.02	-1.39			
Age	05	.02	-1.07			
Gender	.03	.08	.72			
Race	10	.10	-2.46*			
Positive Affectivity	.09	.06	2.00*			
Negative Affectivity	.00	.05	.02			
Skill Variety	.26	.03	5.72***			
Recp. Interdependence	.43	.04	8.97***			
MTurk Sample	.13	.10	2.86**			

*Hierarchical Regression Analysis of Sample Type Predicting Outcome Accountability with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

p < .05, p < .01, p < .01, p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.33	.11	.11***
Organizational Tenure	.03	.02	.53			
Age	06	.02	-1.22			
Gender	.08	.08	1.81			
Race	11	.10	-2.39*			
Positive Affectivity	.30	.05	6.45***			
Negative Affectivity	03	.05	55			
Step 2				.36	.13	.02**
Organizational Tenure	.07	.02	1.40			
Age	08	.02	-1.60			
Gender	.09	.08	1.96			
Race	11	.10	-2.42*			
Positive Affectivity	.31	.05	6.87***			
Negative Affectivity	.00	.05	.08			
MTurk Sample	.15	.09	3.22**			

*Hierarchical Regression Analysis of Sample Type Predicting Process Accountability without Skill Variety and Reciprocal Interdependence* 

*Note.* Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other. \*p < .05, \*\*p < .01, \*\*\*p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.48	.23	.23***
Organizational Tenure	03	.02	74			
Age	08	.02	-1.61			
Gender	.05	.07	1.21			
Race	10	.09	-2.36*			
Positive Affectivity	.14	.05	2.92**			
Negative Affectivity	06	.05	-1.36			
Skill Variety	.28	.03	5.68***			
Recp. Interdependence	.18	.04	3.78***			
Step 2				.55	.30	.06***
Organizational Tenure	.03	.02	.68			
Age	10	.02	-2.14*			
Gender	.06	.07	1.50			
Race	10	.09	-2.53*			
Positive Affectivity	.14	.05	3.08**			
Negative Affectivity	02	.04	48			
Skill Variety	.27	.03	5.66***			
Recp. Interdependence	.31	.04	6.09***			
MTurk Sample	.29	.09	6.34***			

*Hierarchical Regression Analysis of Sample Type Predicting Process Accountability with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.46	.21	.21
Organizational Tenure	04	.02	92			
Age	.09	.02	1.85			
Gender	.15	.07	3.62***			
Race	.05	.09	1.14			
Positive Affectivity	.41	.05	9.57***			
Negative Affectivity	01	.04	19			
Step 2				.52	.27	.05
Organizational Tenure	06	.02	-1.36			
Age	.11	.02	2.36*			
Gender	.13	.07	3.19**			
Race	.08	.09	1.82			
Positive Affectivity	.33	.05	7.53***			
Negative Affectivity	01	.04	27			
Proc Acc	.25	.04	5.69***			
MTurk Sample	05	.08	-1.18			
Step 3				.52	.27	.00
Organizational Tenure	06	.02	-1.39			
Age	.11	.02	2.36*			
Gender	.13	.07	3.16**			
Race	.08	.09	1.82			
Positive Affectivity	.33	.05	7.48***			
Negative Affectivity	01	.04	32			
Proc Acc	.21	.08	2.50*			
MTurk Sample	15	.34	86			
Proc Acc X MTurk	.12	.09	.59			

Hierarchical Regression Analysis of Sample Type and Process Accountability Predicting Job Performance without Skill Variety and Reciprocal Interdependence

*Note.* Acc Int = Accountability Intensity. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.53	.28	.28***
Organizational Tenure	07	.02	-1.69			
Age	.07	.02	1.54			
Gender	.13	.07	3.23**			
Race	.05	.09	1.28			
Positive Affectivity	.31	.05	6.83***			
Negative Affectivity	02	.04	56			
Skill Variety	.25	.03	5.25***			
Recp. Interdependence	.05	.04	1.12			
Step 2				.55	.30	.02**
Organizational Tenure	07	.02	-1.53			
Age	.09	.02	1.83			
Gender	.12	.07	3.05**			
Race	.07	.09	1.71			
Positive Affectivity	.29	.05	6.34***			
Negative Affectivity	01	.04	33			
Skill Variety	.20	.03	4.17***			
Recp. Interdependence	.02	.04	.40			
Proc Acc	.17	.05	3.56***			
MTurk Sample	.00	.09	03			
Step 3				.55	.30	.00
Organizational Tenure	07	.02	-1.52			
Age	.09	.02	1.83			
Gender	.12	.07	3.05**			
Race	.07	.09	1.70			
Positive Affectivity	.29	.05	6.33***			
Negative Affectivity	01	.04	31			
Skill Variety	.20	.03	4.17***			
Recp. Interdependence	.02	.04	.42			
Proc Acc	.19	.08	2.24*			
MTurk Sample	.04	.35	.23			
Proc Acc X MTurk	05	.09	25			

*Hierarchical Regression Analysis of Sample Type and Process Accountability Predicting Job Performance with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Acc Int = Accountability Intensity. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

controlling for task characteristics ( $\beta$  = -.13, p < .01). Consequently, Hypothesis 3a received mixed support. Tables 13 and 14 report hierarchical regression results for testing Hypothesis 3a.

Hypothesis 3b predicted that accountability salience would have a positive relationship with job satisfaction. This was significant in the expected direction while controlling for task characteristics ( $\beta = .24$ , p < .001) and while not controlling for task characteristics ( $\beta = .36$ , p < .001). Consequently, Hypothesis 3b was supported ( $\beta = .31$ , p < .001). Tables 15 and 16 report hierarchical regression results for testing Hypothesis 3b.

Hypothesis 3c predicted that the relationship between accountability salience and job satisfaction is moderated by job type such that the relationship would be stronger for traditional workers than it would be for platform workers. This was not significant while controlling for task characteristics ( $\beta = .19$ , p = .19) and while not controlling for task characteristics ( $\beta = .15$ , p = .33). Consequently, Hypothesis 3c was not supported. Tables 17 and 18 report hierarchical regression results for testing Hypothesis 3c.

The research question inquired if platform workers have greater levels of felt accountability than traditional workers. This was significant such that platform workers had higher levels of felt accountability while controlling for task characteristics ( $\beta = .10$ , p < .05), and insignificant while not controlling for task characteristics ( $\beta = .08$ , p = .11). Tables 19 and 20 report hierarchical regression results for testing Hypothesis 3c.

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.38	.14	.14***
Organizational Tenure	.12	.04	2.62**			
Age	.03	.03	.62			
Gender	.10	.15	2.26*			
Race	03	.18	56			
Positive Affectivity	.32	.09	7.20***			
Negative Affectivity	.04	.09	.83			
Step 2				.40	.16	.02**
Organizational Tenure	.08	.04	1.75			
Age	.05	.03	.95			
Gender	.09	.15	2.16*			
Race	02	.18	54			
Positive Affectivity	.31	.09	6.83***			
Negative Affectivity	.01	.09	.28			
MTurk Sample	13	.17	-2.88**			

*Hierarchical Regression Analysis of Sample Type Predicting Accountability Salience without Skill Variety and Reciprocal Interdependence* 

*Note.* Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other. \*p < .05, \*\*p < .01, \*\*\*p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.74	.54	.54***
Organizational Tenure	.01	.03	.17			
Age	.04	.02	1.18			
Gender	.05	.11	1.45			
Race	03	.13	79			
Positive Affectivity	.04	.08	1.17			
Negative Affectivity	04	.07	-1.20			
Skill Variety	.40	.05	10.5***			
Recp. Interdependence	.43	.06	11.4***			
Step 2				.74	.54	.01**
Organizational Tenure	.03	.03	.81			
Age	.04	.02	.99			
Gender	.05	.11	1.57			
Race	03	.13	84			
Positive Affectivity	.04	.07	1.19			
Negative Affectivity	03	.07	79			
Skill Variety	.40	.05	10.49***			
Recp. Interdependence	.47	.06	11.71***			
MTurk Sample	.11	.14	2.83**			

*Hierarchical Regression Analysis of Sample Type Predicting Accountability Salience with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.45	.20	.20
Organizational Tenure	04	.02	78			
Age	.09	.02	1.79			
Gender	.11	.07	2.59*			
Race	.07	.09	1.62			
Positive Affectivity	.32	.05	7.25***			
Negative Affectivity	17	.04	-3.78***			
MTurk Sample	.04	.08	.98			
Step 2				.55	.31	.11
Organizational Tenure	07	.02	-1.52			
Age	.07	.01	1.53			
Gender	.08	.07	1.91			
Race	.08	.08	1.97*			
Positive Affectivity	.21	.04	4.85***			
Negative Affectivity	18	.04	-4.17***			
MTurk Sample	.09	.08	2.12*			
Acc Sal	.36	.02	8.29***			

*Hierarchical Regression Analysis of Accountability Salience Predicting Job Satisfaction without Skill Variety and Reciprocal Interdependence* 

*Note.* Acc Sal = Accountability Salience. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.57	.32	.32***
Organizational Tenure	07	.02	-1.49			
Age	.05	.01	1.03			
Gender	.08	.07	1.94			
Race	.08	.08	1.95			
Positive Affectivity	.17	.05	3.94***			
Negative Affectivity	19	.04	-4.49***			
Skill Variety	.36	.03	7.78***			
Recp. Interdependence	.07	.04	1.32			
MTurk Sample	.11	.08	2.42*			
Step 2				.59	.35	.03***
Organizational Tenure	07	.02	-1.68			
Age	.04	.01	.83			
Gender	.06	.06	1.64			
Race	.09	.08	2.16*			
Positive Affectivity	.16	.04	3.78***			
Negative Affectivity	19	.04	-4.43***			
Skill Variety	.27	.03	5.21***			
Recp. Interdependence	05	.04	88			
MTurk Sample	.09	.08	1.88			
Acc Sal	.24	.03	4.23***			

*Hierarchical Regression Analysis of Accountability Salience Predicting Job Satisfaction with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Acc Sal = Accountability Salience. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.
Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.45	.20	.20
Organizational Tenure	05	.02	-1.09			
Age	.09	.02	1.92			
Gender	.11	.07	2.55*			
Race	.07	.09	1.63			
Positive Affectivity	.31	.05	7.18***			
Negative Affectivity	18	.04	-4.03***			
Step 2				.55	.31	.11
Organizational Tenure	07	.02	-1.52			
Age	.07	.01	1.53			
Gender	.08	.07	1.91			
Race	.08	.08	1.97*			
Positive Affectivity	.21	.04	4.85***			
Negative Affectivity	18	.04	-4.17***			
Acc Int	.36	.02	8.29***			
MTurk Sample	.09	.08	2.12*			
Step 3				.55	.31	.00
Organizational Tenure	06	.02	-1.45			
Age	.08	.01	1.65			
Gender	.08	.07	1.91			
Race	.08	.08	1.94			
Positive Affectivity	.21	.04	4.82***			
Negative Affectivity	18	.04	-4.18***			
Acc Int	.28	.04	3.17**			
MTurk Sample	05	.26	31			
Acc Int X MTurk	.15	.05	.98			

Hierarchical Regression Analysis of Sample Type and Accountability Salience Predicting Job Satisfaction without Skill Variety and Reciprocal Interdependence

*Note.* Acc Int = Accountability Intensity. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.56	.31	.31***
Organizational Tenure	09	.02	-2.08*			
Age	.06	.01	1.20			
Gender	.07	.07	1.83			
Race	.08	.08	1.98*			
Positive Affectivity	.17	.05	3.90***			
Negative Affectivity	21	.04	-4.86***			
Skill Variety	.37	.03	7.81***			
Recp. Interdependence	.02	.03	.44			
Step 2				.59	.35	.04***
Organizational Tenure	07	.02	-1.69			
Age	.04	.01	.84			
Gender	.06	.06	1.64			
Race	.09	.08	2.16*			
Positive Affectivity	.16	.04	3.78***			
Negative Affectivity	19	.04	-4.43***			
Skill Variety	.27	.03	5.21***			
Recp. Interdependence	05	.04	88			
Acc Int	.24	.03	4.23***			
MTurk Sample	.09	.08	1.88			
Step 3				.59	.35	.00
Organizational Tenure	07	.02	-1.59			
Age	.05	.01	.98			
Gender	.06	.06	1.63			
Race	.09	.08	2.12*			
Positive Affectivity	.16	.04	3.74***			
Negative Affectivity	18	.04	-4.44***			
Skill Variety	.27	.03	5.26***			
Recp. Interdependence	05	.04	96			
Acc Int	.15	.05	1.55			
MTurk Sample	09	.26	64			
Acc Int X MTurk	.19	.05	1.30			

Hierarchical Regression Analysis of Sample Type and Accountability Salience Predicting Job Satisfaction with Skill Variety and Reciprocal Interdependence

*Note.* Recp. Interdependence = Reciprocal Interdependence. Acc Int = Accountability Intensity. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

p < .05, p < .01, p < .01, p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.35	.13	.13***
Organizational Tenure	.12	.03	2.47*			
Age	03	.02	52			
Gender	.02	.11	.35			
Race	10	.14	-2.11*			
Positive Affectivity	.32	.07	7.14***			
Negative Affectivity	.09	.07	1.85			
Step 2				.36	.13	.01
Organizational Tenure	.10	.03	1.93			
Age	02	.02	32			
Gender	.01	.11	.28			
Race	10	.14	-2.11*			
Positive Affectivity	.31	.07	6.90***			
Negative Affectivity	.07	.07	1.50			
MTurk Sample	08	.13	-1.62			

*Hierarchical Regression Analysis of Sample Type Predicting Felt Accountability without Skill Variety and Reciprocal Interdependence* 

*Note.* Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other. \*p < .05, \*\*p < .01, \*\*\*p < .001 (2-tailed)

Step & Variable	β	SE	t	R	$R^2$	$\Delta R^2$
Step 1				.58	.33	.33***
Organizational Tenure	.03	.03	.74			
Age	01	.02	21			
Gender	02	.10	55			
Race	10	.12	-2.49*			
Positive Affectivity	.13	.07	2.89**			
Negative Affectivity	.03	.06	.80			
Skill Variety	.27	.04	5.85***			
Recp. Interdependence	.32	.05	7.15***			
Step 2				.59	.34	.01*
Organizational Tenure	.05	.03	1.23			
Age	02	.02	38			
Gender	02	.10	47			
Race	10	.12	-2.52*			
Positive Affectivity	.13	.07	2.92**			
Negative Affectivity	.05	.06	1.13			
Skill Variety	.27	.04	5.79***			
Recp. Interdependence	.37	.06	7.51***			
MTurk Sample	.10	.13	2.28*			

*Hierarchical Regression Analysis of Sample Type Predicting Felt Accountability with Skill Variety and Reciprocal Interdependence* 

*Note.* Recp. Interdependence = Reciprocal Interdependence. Gender dummy coded 1 = Female, 0 = Other. Race dummy coded 1 = White, 0 = Other.

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001 (2-tailed)

## 5.4 Summary

In this chapter, the results of empirical testing of the hypotheses proposed in Chapter Three were presented. A summary of the results can be found in Table 21.

Summary of Results of Hypothesis Testing

Hypothesis	Without Skill Variety & Reciprocal Interdependence	With Skill Variety & Reciprocal Interdependence
<b>Hypothesis 1a:</b> Relative to traditional workers, platform workers will experience less accountability intensity.	Not Supported	Not Supported
<b>Hypothesis 1b:</b> The relationship between accountability intensity and performance is moderated by job type such that the relationship will be weaker for platform workers than it will be for traditional workers.	Not Supported	Not Supported
<b>Hypothesis 2a:</b> Relative to traditional workers, platform workers will experience more outcome accountability.	Not Supported	Supported
<b>Hypothesis 2b:</b> Relative to traditional workers, platform workers will experience less process accountability.	Not Supported	Not Supported
<b>Hypothesis 2c:</b> The relationship between process accountability and performance is moderated by job type such that the relationship will be weaker for platform workers than it will be for traditional workers.	Not Supported	Not Supported
<b>Hypothesis 3a:</b> Relative to traditional workers, platform workers will experience less accountability salience.	Supported	Not Supported
<b>Hypothesis 3b:</b> Accountability salience has a positive relationship with job satisfaction.	Supported	Supported
<b>Hypothesis 3c:</b> The relationship between accountability salience and job satisfaction is moderated by job type such that the relationship will be weaker for platform workers than it will be for traditional workers.	Not Supported	Not Supported
<b>Research Question:</b> Do platform workers have different levels of felt accountability than traditional workers?		

#### **CHAPTER 6: DISCUSSION**

#### **6.1 General Discussion**

This dissertation was among the first research to examine how differing accountability systems result in different felt accountability, and the first to examine this link in labor platforms. The link between accountability systems and felt accountability is crucial. Without accountability systems there would be no way for organizations to influence individuals' felt accountability; without felt accountability, accountability systems would have no pathway through which to influence individuals' behaviors and attitudes in the workplace (Lewin, 1936; Frink & Klimoski, 1998). Despite there being theoretical work that has detailed this link (Hall et al., 2003; Frink et al., 2008), there has been little empirical work that examines this link in varying circumstances (see Dewi & Riantoputra, 2019; Hall et al., 2003 for exceptions), and none that look at non-traditionally managed forms of work. Looking at how this link operates in non-traditionally managed forms of work is timely. Accountability is becoming increasingly fragmented, with control being exerted by more and more entities, instead of being exerted primarily by one's employer as was the case in traditional jobs (Weil, 2014).

Through a review of the labor platforms literature using the framework of accountability, it was argued that there are substantial differences between the accountability systems of labor platforms and traditional organizations. Four key differences were detailed. First, on labor platforms, workers do not have two common accountability sources that are dominant in traditional organizations: bosses and coworkers. Instead, the primary sources of accountability are customers and the apps on which they work. Second, it was reasoned that there was less accountability intensity on labor platforms because each task is not part of an extensive web of accountabilities, but instead are typically one-off transactions. Third, it was argued that platform

workers are judged primarily on the basis of outcomes instead of processes. Finally, it was argued that work on labor platforms is objectively less salient than work in traditional organizations due to the boringness of work tasks and the lack of connection experienced to broader work outcomes.

Based on these differences, a series of eight hypotheses and one research question was tested. One set of hypotheses (1a, 2a, 2b, & 3b) predicted that there would be differences in features of the accountability environment (accountability intensity, accountability focus, and accountability salience) between labor platforms and traditional organizations that were theoretically similar to differences in their accountability systems. For the most part, these hypotheses were not significant in the expected direction. First, it was predicted that platform workers would experience less accountability intensity than traditional workers. This was insignificant without controlling for skill variety and reciprocal interdependence, and significant in the opposite direction when controlling for both variables. Second, it was predicted that platform workers would experience more outcome accountability than traditional workers. This was insignificant without controlling for skill variety and reciprocal interdependence, and significant in the expected direction when controlling for both variables. Third, it was predicted that platform workers would experience less process accountability than traditional workers. This was significant in the opposite direction with and without controlling for skill variety and reciprocal interdependence. Fourth, it was predicted that platform workers would experience less accountability salience than traditional workers. This was significant in the expected direction without controlling for skill variety and reciprocal interdependence, but significant in the opposite direction when controlling for the two variables. Finally, results from the research question found that differences in the level of felt accountability between platform workers and

traditional workers was not significant without controlling for skill variety and reciprocal interdependence, but that platform workers had significantly more felt accountability with skill variety and reciprocal interdependence controlled for.

One pattern which is clear from these results is that when skill variety and reciprocal interdependence were controlled for, platform workers had more accountability than traditional workers did across all of the accountability measures used. Often controlling for task characteristics led to substantially different results than not controlling for task characteristics. Specifically, in three out four hypotheses and the research question, controlling for task characteristics made results either move from non-significant to significant (accountability intensity, outcome accountability, felt accountability), or move from being significant in one direction to significant in the other direction (accountability salience). In the remaining hypothesis which examined levels of accountability between platform workers and traditional workers, more process accountability resulted from using the task characteristic controls ( $\beta =$ .29) than not using the controls ( $\beta = .15$ ). It is therefore clear that platform workers experience more accountability than traditional workers do when controlling for the fact that traditional workers' tasks are more varied in skill and more team-driven. This suggests that for unvaried and non-team-oriented tasks, labor platforms are successful in making their workers feel accountable. What is less clear from the analysis is whether platform workers have a greater level of accountability than do traditional workers without controlling for task characteristics. Findings varied across the hypotheses tested, with platform workers having more process accountability (contrary to expectations), less accountability salience, and insignificant differences in accountability intensity, outcome accountability, and felt accountability.

However, post hoc analysis points towards a reason why there were no differences in felt accountability when not controlling for task characteristics. The felt accountability measure used in this dissertation uses referents that existed in traditional organizations, but not in labor platforms. For instance, two items from the felt accountability measure were "Management holds me accountable for all of my decisions" and "Coworkers, subordinates, and bosses closely scrutinize my efforts at work". Because platform workers have no management, bosses, coworkers, or subordinates holding them accountable using these items may have resulted in artificially low levels of accountability being reported by platform workers. In post hoc analysis, a different felt accountability scale which did not contain these referents was used ( $\alpha = .83$ ). Example items include "I may be rewarded on the basis of how well my work is done" and "I am rewarded for completing work tasks" (full measures are available in the appendix). When comparing felt accountability levels between platform workers and traditional workers using this measure, a clear difference emerged. Platform workers had substantially more felt accountability not only with controlling for task characteristics ( $\beta = .36$ ; p<.001), but also without ( $\beta = .27$ ; p<.001) controlling for task characteristics. As such, while there is still a complex pattern of findings regarding the differences in accountability between platform workers and traditional workers, it may be safe to conclude that platform workers experience accountability at higher levels overall.

Additional hypotheses predicted the consequences of differences in felt accountability on the effectiveness and experience of work between labor platforms and traditional organizations. In these hypotheses, it was argued that the consequences of accountability would differ based on job type. More specifically, it was argued that accountability intensity would have a less positive relationship with job performance, that process accountability would have a less positive

relationship with job performance, and that accountability salience would have a less positive relationship with job satisfaction for workers in labor platforms than for workers in traditional organizations. None of these hypotheses were substantiated, although it is notable that the opposite was found for accountability intensity: higher levels of accountability intensity resulted in greater performance amongst platform workers as compared to traditional workers. It was predicted and found that higher levels of accountability salience are predictive of higher levels of job satisfaction.

#### 6.2 Contributions & Limitations

This dissertation attempted to make two primary contributions to the accountability literature. First, it aimed to show that differences between the objective accountability systems of labor platforms and traditional organizations resulted in theoretically equivalent differences in felt accountability. Second, it aimed to show that felt accountability led to differing outcomes in different kinds of work (labor platforms vs. traditional organizations). Because differences in task characteristics between the dissertation's samples of platform workers and traditional workers may be either an artifact of the sample or reflective of true differences, results were tested with and without controlling for task characteristics. Resultantly, none of the hypotheses which looked at differences in levels of accountability across sample type were substantiated with and without controlling for task characteristics. However, despite the lack of significant findings, a clear pattern emerged. When controlling for task characteristics, platform workers experienced more accountability across the host of measures used than did traditional workers. This pattern is tackled in greater detail in directions for future research.

Despite the lack of expected findings, this dissertation offers three major contributions to the organizational sciences literatures. First, this dissertation contributed to the accountability

literature by providing an in-depth review of the link between accountability systems and felt accountability. While the link between accountability systems and felt accountability is crucial, most papers on accountability emphasize one or the other. There have been few empirical papers that have examined the link, and the last paper that placed substantial emphasis on describing the link was published in 2008 (i.e., Frink et al., 2008). By focusing on this link, this dissertation helps to detail the entire lifecycle of accountability in organizations, from systems to felt accountability. As such, it helps illuminate the bridge between the context and consequences of accountability.

Second, this dissertation contributes to both the accountability and labor platforms literatures by being the first scholarly work to examine labor platforms through the lens of felt accountability. Extant work on labor platforms, including work on algorithmic management (Kuhn et al., 2021), has addressed the topic of how workers in labor platforms are held accountable. However, this work has focused on the systems used to hold workers accountable and not the resulting differences in how workers actually experience accountability. Through focusing on the lived realities of platform workers, this dissertation meets the call for more HRM research into gig employment (Kuhn & Galloway, 2019; Spreitzer et al., 2017). Second, the accountability literature has largely focused on and tested theory within traditional organizations. However, there are a myriad of reasons to expect that both accountability systems and felt accountability differ substantially between traditional organizations and other forms of work. Even though differences in accountability between the two forms of work were not as expected, this opens up theorizing about why this is the case. This is discussed in future directions.

Third, this dissertation offers preliminary evidence that platform workers experience more accountability than do traditional workers. Across all accountability types measured in this

dissertation, platform workers experienced more accountability than did traditional workers when controlling for task characteristics. While this pattern was less clear without controlling for task characteristics, post hoc analysis showed that felt accountability was significantly higher for platform workers when using a scale that eliminated referents (e.g., management, coworkers) that were not relevant to platform workers. Because accountability is a key motivator of performance which can lead to positive work outcomes (Schlenker et al., 1994), this points towards the possibility that greater levels of worker accountability are a key reason for the success of labor platforms. However, as accountability can also have curvilinear effects on performance (Amneter et al., 2004; Frink et al., 2008), owing to its nature as a workplace stressor (Ferris et al., 1995), it is unclear the extent to which this greater accountability is beneficial for performance. This is discussed in more detail in directions for future research.

Methodologically, this dissertation had one primary strength and one primary weakness. The primary methodological strength of this dissertation was that it reported results with and without controlling for the task characteristics of the work. Doing so resulted in two theoretically important comparisons: one which compared platform work to a varied collection of traditional jobs, and one which compared platform work to work similar in task characteristics. Having both comparisons is important, because it is unclear if platform work being low in skill variety and task interdependence is due to an artifact of this dissertation's sampling, or to the limitation of labor platforms in handling complex interconnected work, or to both. The primary methodological weakness of this study was that it only drew from one sample of platform workers. This may have biased results. Most notably, the work on MTurk does not require high levels of skill. This is not true of all labor platforms. For instance, there are labor platforms that provide medical and legal services. It is possible that the platform workers providing high-skill

services would report substantially higher levels of skill variety and task interdependence. If this were the case, it would allow for the testing of hypotheses without the need to control for skill variety and task interdependence. On the other hand, if these high-skilled workers still reported low levels of skill variety and task interdependence, it would strongly imply that these are task characteristics which are central to the organization of work on labor platforms. If this were the case, it would then be inappropriate to control for skill variety and task interdependence when comparing platform workers to traditional workers.

#### **6.3 Directions for Future Research**

There are two primary avenues for future research that stem from this dissertation. The first is to test this and similar theory within additional samples of labor platforms. This is an important undertaking because not all labor platforms are the same. Instead, they vary in important ways including the skill of their work and whether they provide virtual or in-person services (Jabagi et al., 2019). Testing this theory in additional samples will allow for results to generalize to labor platforms more broadly and to develop a better understanding of the task characteristics of work on labor platforms across a broad array of labor platforms. Similarly, while this dissertation used a diverse student-generated sample, the findings would be strengthened by collecting data inside a single traditional organization.

The second is to provide a more in-depth examination of the link between accountability and job outcomes across different organization types. This dissertation offered preliminary evidence that platform workers experience more accountability than do traditional workers. While this points towards better job performance for platform workers, more accountability is not always better (Dubnick, 2005), with accountability being theorized to have a curvilinear relationship with job performance (Amneter et al., 2004; Frink et al., 2008). Therefore, as a

future step in this research stream, researchers should examine the impact of labor platforms' greater accountability on performance. A finding from this dissertation should be helpful in that pursuit. Contrary to expectations, it was found that accountability intensity had a substantially more positive relationship with job performance amongst platform workers than it did amongst traditional workers (with and without controlling for task characteristics). This suggests that the impacts of accountability may differ based on job type, with platform workers possibly benefiting from greater accountability intensity in their work and/or experiencing less of its downsides. Thus, beyond simply inducing more accountability amongst its workers, labor platforms may more effectively channel the accountability of its workers into job performance.

#### 6.4 Conclusion

The link between accountability systems and felt accountability is crucial to the enactment of accountability in organizations. This underexplored link was reviewed in-depth for the first time since 2008 (Frink et al., 2008). It was then theorized about and examined within the context of labor platforms. It was argued that the accountability systems of labor platforms and traditional organizations differ substantially and that they would result in theoretically similar differences in felt accountability. However, for the most part, it was found that felt accountability between labor platforms and traditional organizations did not differ as expected and instead that a pattern of greater felt accountability in labor platforms emerged. Further exploring differences in felt accountability and their consequences for performance offers a promising direction of research for both accountability and labor platform scholars.

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### **APPENDIX A: MEASURES**

## Felt Accountability (Original)

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Neither Agree Sligh Disagree nor Disagree Agr 3 4 5		htly ree	Ν	Moderately Agree			y Strong Agree 7		
1	2	5	+		)		(	J		/		
I am held work.	very accountab	ble for my a	ctions at		1	2	3	4	5	6	7	
I often hav work.	often have to explain why I do certain things at vork.					2	3	4	5	6	7	
Managem decisions.	Management holds me accountable for all of my decisions.					2	3	4	5	6	7	
If things a should, I v	If things at work do not go the way that they should, I will hear about it from management.				1	2	3	4	5	6	7	
To a great work grou	t extent, the suc p rests on my	cess of my shoulders.	immediate		1	2	3	4	5	6	7	
The jobs of success of	The jobs of many people at work depend on my success or failures.				1	2	3	4	5	6	7	
In the grand scheme of things, my efforts at work are very important.					1	2	3	4	5	6	7	
Coworker scrutinize	s, subordinates my efforts at v	, and bosses vork.	sclosely		1	2	3	4	5	6	7	

## Felt Accountability (Modified)

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Neither Agree Slight Disagree nor Disagree Agre			Moderatel Agree			y Strongly Agree		
1	I 2 5 4						(	)			
I am held very accountable for my actions at work.				1	2	3	4	5	6	7	
I might be punished because of the actions I took at work.					1	2	3	4	5	6	7
I am held	accountable fo	r all my dec	isions.		1	2	3	4	5	6	7
I may be rewarded on the basis of how well my work is done.				1	2	3	4	5	6	7	
My work is closely scrutinized.			1	2	3	4	5	6	7		
How people view my behavior may lead to punishments at work.					1	2	3	4	5	6	7

There are people who hold me accountable at work.	1	2	3	4	5	6	7
I always need to do my best at work, because I might be punished if I don't.	1	2	3	4	5	6	7
There are systems in place which hold me accountable at work.	1	2	3	4	5	6	7
I am rewarded for completing work tasks.	1	2	3	4	5	6	7

## Accountability Intensity

Strongly Disagree 1	Moderately Disagree 2	Slightly Disagree 3	Neither Agree nor Disagree 4	Slig Ag	ghtly gree 5	N	Moderately Agree 6		у	Strong Agre 7	
	a 1 10 11 1 0 1100										
I find mys	find myself accountable to a variety of different				1	2	3	4	5	6	7
people.											
The scope	The scope of things for which I may have to					2	3	4	5	6	7
answer is	very broad.	5									
The scope	of people to w	hom I may	have to		1	2	3	4	5	6	7
answer is very broad.											
I find mys	I find myself accountable to many different					2	3	4	5	6	7
people for	many differen	t things.									

# Process Control (Process Accountability)

Strongly				Strongly
Disagree	Disagree	Uncertain	Agree	Agree
1	2	3	4	5

There are written rules concerning many organizational activities.	1	2	3	4	5
Written rules are strictly enforced	1	2	3	4	5
Written rules and procedures are followed	1	2	3	4	5
There are clear formalized procedures for resolving conflict in this organization.	1	2	3	4	5

## **Output Control (Output Accountability)**

Strongly				Strongly
Disagree	Disagree	Uncertain	Agree	Agree
1	2	3	4	5

Specific goals are established for my job.	1	2	3	4	5
The extent to which I attain expected goals is monitored.	1	2	3	4	5
I receive feedback from my work context (immediate supervisor or from team members) concerning the extent to which I achieve expected goals.	1	2	3	4	5
My career progression is dependent on my performance related to expected goals.	1	2	3	4	5

#### Accountability Salience

Strongly	Moderately	Slightly	Neither Agree	Slightly	Moderately	Strongly
Disagree	Disagree	Disagree	nor Disagree	Agree	Agree	Agree
1	2	3	4	5	6	7

I am accountable for some really important programs and projects at work.	1	2	3	4	5	6	7
I deal with, and am accountable for, critical issues and projects that contribute strongly to the effectiveness of my work unit.	1	2	3	4	5	6	7
The work I do, and am accountable for, is central to the overall effectiveness of my organization.	1	2	3	4	5	6	7
I am accountable for some of the most important work we do in my organization.	1	2	3	4	5	6	7

#### **Job Performance**

How applicable are the following to your latest day of work...

Totally Not	Slightly	Somewhat	Moderately	Totally
Applicable	Applicable	Applicable	Applicable	Applicable
1	2	3	4	5

Today, I achieved the objectives of my job.	1	2	3	4	5
Today, I have met my criteria for job	1	2	3	4	5
performance.					
Today, I demonstrated expertise in all job-related	1	2	3	4	5
tasks.					

Today, I fulfilled all the requirements of my job.	1	2	3	4	5
Today, I could manage more responsibility than typically assigned to me.	1	2	3	4	5
Today, I appeared to be suitable for a higher level role.	1	2	3	4	5
Today, I was competent in all areas of the job, and handled tasks with proficiency.	1	2	3	4	5
Today, I performed well in the overall job by carrying out tasks as expected.	1	2	3	4	5
Today, I planned and organized to achieve objectives of the job and meet deadlines.	1	2	3	4	5

### Job Satisfaction Scale

Strongly	trongly							
Disagree	Disagree	Uncertain	Agree	Agree				
1	2	3	4	5				
I feel fairly s	atisfied with m	y present job.		1	2	3	4	5
Most days I am enthusiastic about my work.						3	4	5
Each day at y	vork seems like	it will never end	1 (R)	1	2	3	4	5

Wost days I am entitusiastic about my work.	1	4	5	4	5
Each day at work seems like it will never end. (R)	1	2	3	4	5
I find real enjoyment in my work.	1	2	3	4	5
I consider my job to be rather pleasant.	1	2	3	4	5

### **Skill Variety**

Strongly Disagree 1	Moderately Disagree 2	Slightly Disagree 3	Neither Agree nor Disagree 4	Slig Ag	ghtly gree 5	N	Moderate Agree 6			Moderately Agree 6			Stror Agı 7	ngly ree
Does your job have variety? Having variety means you are required to do many different things at work, using a variety of your skills and talents.					1	2	3	4	5	6	7			
Does your job require you to use a number of complex or high-level skills?					1	2	3	4	5	6	7			
Is your jo	b complex and	non-repetiti	ve?		1	2	3	4	5	6	7			

#### **Reciprocal Interdependence**

Strongly				Strongly
Disagree	Disagree	Uncertain	Agree	Agree
1	2	3	4	5

I work closely with others in doing my own work.	1	2	3	4	5
I frequently must coordinate my efforts with	1	2	3	4	5
others.					
My own performance is dependent on receiving	1	2	3	4	5
accurate information from others.					
The way I perform my job has a significant	1	2	3	4	5
impact on others.					
My work requires me to consult with others fairly	1	2	3	4	5
frequently.					

#### **Positive and Negative Affect Schedule**

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you generally feel this way, that is, how you feel on the average. Use the following scale to record your answers.

Very slightly								
or not at all	A little	Moderately	Quite a bit	E	xtrer			
1	2	3	4		5			
Interested				1	2	3	4	5
Distressed				1	2	3	4	5
Excited				1	2	3	4	5
Upset				1	2	3	4	5
Strong				1	2	3	4	5
Guilty				1	2	3	4	5
Scared				1	2	3	4	5
Hostile				1	2	3	4	5
Enthusiastic				1	2	3	4	5
Proud				1	2	3	4	5
Irritable				1	2	3	4	5
Alert				1	2	3	4	5
Ashamed				1	2	3	4	5
Inspired				1	2	3	4	5
Nervous				1	2	3	4	5

Determined	1	2	3	4	5
Attentive	1	2	3	4	5
Jittery	1	2	3	4	5
Active	1	2	3	4	5
Afraid	1	2	3	4	5

- 1. **Age:** 
  - Less than 18 18-25 25-30 30-35 35-40 40-45 45-50 50-55 55-60 60-65 65+

#### 2. Gender:

Male Female Non-binary / Third Gender Other Prefer Not to Say

#### 3. **Race:**

Black/African American White/Caucasian Asian/Pacific Islander Native American Multiple Races Other Prefer Not to Say

#### 4. How long have you been with your current organization:

0-1 months 1-3 months 3-6 months 6-12 months 1-2 years 2-5 years 5-10 years 10-20 years 20+ years

#### APPENDIX B: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

# MICHIGAN STATE

#### **EXEMPT DETERMINATION**

October 26, 2018

- To: Angela T Hall
- Re: MSU Study ID: STUDY00001591 Principal Investigator: Angela T Hall Category: Exempt 2 Exempt Determination Date: 10/26/2018
- Title: Accountability of Gig and Platform Workers

This study has been determined to be exempt under 45 CFR 46.101(b) 2.

**Principal Investigator (PI) Responsibilities**: The PI assumes the responsibilities for the protection of human subjects in this study as outlined in Human Research Protection Program (HRPP) Manual Section 8-1, Exemptions.

Continuing Review: Exempt studies do not need to be renewed.



Office of Regulatory Affairs Human Research Protection Program

> 4000 Collins Road Suite 136 Lansing, MI 48910

517-355-2180 Fax: 517-432-4503 Email: irb@msu.edu www.hrpp.msu.edu **Modifications**: In general, investigators are not required to submit changes to the Michigan State University (MSU) Institutional Review Board (IRB) once a research study is designated as exempt as long as those changes do not affect the exempt category or criteria for exempt determination (changing from exempt status to expedited or full review, changing exempt category) or that may substantially change the focus of the research study such as a change in hypothesis or study design. See HRPP Manual Section 8-1, Exemptions, for examples. If the study is modified to add additional sites for the research, please note that you may not begin the research at those sites until you receive the appropriate approvals/permissions from the sites.

**Change in Funding**: If new external funding is obtained for an active study that had been determined exempt, a new initial IRB submission will be required, with limited exceptions.

**Reportable Events**: If issues should arise during the conduct of the research, such as unanticipated problems that may involve risks to subjects or others, or any problem that may increase the risk to the human subjects and change the category of review, notify the IRB office promptly. Any complaints from participants that may change the level of review from exempt to expedited or full review must be reported to the IRB. Please report new information through the study's workspace and contact the IRB office with any urgent events. Please visit the Human Research Protection Program (HRPP) website to obtain more information, including reporting timelines.

**Personnel Changes**: After determination of the exempt status, the PI is responsible for maintaining records of personnel changes and appropriate training. The PI is not required to notify the IRB of personnel changes on exempt research. However, he or she may wish to submit personnel changes to the IRB for recordkeeping purposes (e.g. communication with the Graduate School) and may submit such requests by submitting a Modification request. If there is a change in PI, the new PI must confirm acceptance of the PI Assurance form and the previous PI must submit the Supplemental Form to Change the Principal Investigator with the Modification request (available at hrpp.msu.edu).

**Closure**: Investigators are not required to notify the IRB when the research study can be closed. However, the PI can choose to notify the IRB when the study can be closed and is especially recommended when the PI leaves the university. Closure indicates that research activities with human subjects are no longer ongoing and have stopped. This means there is no further interaction or intervention with human subjects and/or no further analysis of identifiable private information.

**For More Information**: See HRPP Manual, including Section 8-1, Exemptions (available at <u>hrpp.msu.edu</u>).

**Contact Information:** If we can be of further assistance or if you have questions, please contact us at 517-355-2180 or via email at <u>IRB@msu.edu</u>. Please visit <u>hrpp.msu.edu</u> to access the HRPP Manual, templates, etc.

**Exemption Category.** Please see the appropriate research category below from 45 CFR 46.101(b) for full regulatory text. <sup>123</sup>

**Exempt 1.** Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

**Exempt 2.** Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

**Exempt 3.** Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter. **Exempt 4.** Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

**Exempt 5.** Research and demonstration projects which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

**Exempt 6.** Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

<sup>1</sup>Exempt categories (1), (2), (3), (4), and (5) cannot be applied to activities that are FDA-regulated.

<sup>2</sup> Exemptions do not apply to research involving prisoners.

<sup>3</sup> Exempt 2 for research involving survey or interview procedures or observation of public behavior does not apply to research with children, except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.