"God is Protecting Me ... and I Have Mace": Defensive Labor in Precarious Workplaces

Abstract

Since the 1970s, welfare cuts and market deregulation have made jobs increasingly precarious and workers have been made responsible for their own safety. In this context, technological developments have recently paved the way for the gig economy, in which tasks and services are distributed on digital platforms. Drawing on interviews with 32 Uber and Lyft drivers in New York City and Boston, we document how the intersecting forces of precarity, responsibilization, and organizational innovation spawn the need for "defensive labor," that is, emotional and cognitive self-protective practices.

Keywords: organizations, platforms, gig work, precarity, responsibilization, technology, Uber, emotional labor

Introduction

Jessica, a Black 41-year-old mother of two, works in a supermarket and signed up for Uber to make some extra money on the side. She likes that she can drive whenever it suits her schedule, but is concerned about picking up strangers and is prepared for worst-case scenarios.

God is protecting me ... [and] I have, you know, protection just in case I have to defend myself ... I have mace ... since I started working for Lyft. I never had it before.

Drivers say that they need to be able to defend themselves and develop safety strategies, and a few go as far as to place weapons in their cars. Others confront misbehaving passengers, or strive to stay calm and quiet, even in the face of abuse. Drivers also see platform managers as a threat. Some install cameras so that they can collect data and refute negative customer reviews and complaints, and monitor payments to make sure that Uber doesn't rescind them. These cognitive and emotional self-protection efforts amount to what we call defensive labor. The term captures the burden on workers who have to defend themselves against physical, emotional, and economic costs to complete their principal tasks, which in this case is transportation. Like other unacknowledged forms of labor, such as emotional labor (Hochschild 1983) and some types of cognitive labor (Daminger 2019), defensive work is unequally distributed and has always been a prominent part of particularly risky professions, such as policing (Martin 1999) and sex work (Kong 2006; Kay Hoang 2010). However, we suggest that defensive labor is becoming an onerous part of the job for a wide range of workers in the precariat (Standing 2014), as neoliberal policy continues to shift risk-management responsibilities onto citizens (Garland 1996; Gray 2006; Gray 2009; Hacker 2019) and organizational innovations pave the way for new and under-regulated management practices, as in the emergence of platform-mediated tasks and services (Vallas and Schor 2020).

These developments are part of a broad cultural "risk shift" which is now in its fifth decade (Hacker 2019). Since the 1970s, labor deregulation and welfare cuts have ushered in cultural, political, and economic changes in labor markets. Two concepts have made it easier to unpack and discuss these dynamics. The first is precarity (Kalleberg 2009; Standing 2014): the rise of temporary, informal, or contingent work. The second is responsibilization (Garland 1996; Shamir 2008; Gray 2006; Gray 2009; O'Malley 2009): the transfer of responsibility for worker welfare and risk management from the state and employers to individuals. A salient consequence of these two forces is that a growing

number of people are now told that they are free to design and govern their work lives, but they must do so in a manner that is rational, prudent, and responsible, through risk minimization (O'Malley 2000). They are, in the words of Hacker (2019), on their own. Precarity and responsibilization discourses rarely feature together in the literature, even though they document distinct and complementary workplace characteristics. We join the two ideas in the concept of defensive labor, which captures the risk and uncertainty of precarious labor, and the burden of being responsibilized for your own safety.

Our empirical case is ride hailing. The larger platform economy emerged in the United States about a decade ago (Vallas and Schor 2020) as a deregulated labor market and new combinations in the technology sector (Sundararajan 2016) enabled task distribution and worker management through digital platforms. As Uber and Lyft executives said in two separate interviews: "Uber could not have happened without a connected smartphone with data" (Rose 2016), and "consumers now trust peer review feedback more than they trust government regulation" (Rose 2015). Platforms differ from corporate hierarchies and conventional marketplaces as workers are controlled by algorithms and rating systems, and because workers are typically classified as independent contractors and are thus excluded from the benefits and security associated with full-time employment (Vallas and Schor 2020). Platforms are also distinct due to under-regulation (Dubal 2017). One potential silver lining for ride-hail workers is that platforms' abundant access to data on exchanges, customers, and workers might make work safer than the infamously tough taxi-cab business (Gambetta and Hamill 2005). However, evidence from our interviews with 32 Uber and Lyft drivers in New York City and Boston suggests that while digital technology reduces some risks, on balance, platforms worsen working conditions by perpetuating existing vulnerabilities and creating new ones. Drivers face bodily and emotional threats (e.g. verbal abuse, sexual harassment, and involuntary inclusion in crime), and economic risk (e.g. the threat of being "deactivated"). Driver vulnerabilities are intensified by platform data, as companies prioritize customer satisfaction over worker welfare. Drivers thus face intersecting threats, from the strangers they transport and platform managers, which they mitigate by engaging in emotional and cognitive forms of defensive labor. Drawing on these findings, we suggest that defensive labor can help us understand how workers experience the broader risk shift in Anglo-Saxon work contexts, which are arguably moving into a new phase, with the rise of the platforms. A growing number of workers are now told to "take responsibility [for their] own shit," as Uber's co-founder Travis Kalanick said in an altercation with a driver (Isaac 2017). We analyze the emotional and cognitive burdens of doing just that.

Following a brief literature review and an overview of our research methods, we detail how ride-hail drivers face threats from both strangers and management, both of which require particular forms of defensive labor. We then unpack defensive labor's emotional and cognitive dimensions, discuss the concept's relevance to scholars, workers, and policymakers, and summarize our key findings.

Emotional and Cognitive Dimensions of "Defensive Labor"

Certain forms of labor are underappreciated by people around and above those who perform them (Hochschild 1983; Sutton 1991; Martin 1999; Daminger 2019). One case in point is how workers handle dangers at work by repressing fear and employing self-protection strategies (Eakin 1992; Martin 1999; Kong 2006; McDermott 2006; Gray 2009). By developing the concept of defensive labor, we outline the different emotional and cognitive burdens of risk management, which may in turn help granulate unacknowledged patterns of inequality, as some types of work require more risk management than others. We define defensive labor as *the act of anticipating, managing, and neutralizing*

emotional, physical, or economic workplace threats, where the adversarial consequences primarily fall on the worker, rather than the firm. We distinguish between defensive labor's emotional and cognitive dimensions not because one is more important than the other, but because conceptual clarity might help scholars and workers recognize defensive labor when they see it. Moreover, we note that emotional and cognitive labor are distinct processes that often overlap and sometimes clash. A worker who is emotionally triggered by threats might, in the heat of the moment, struggle to follow risk management strategies, which in turn undermines worker safety, particularly for the inexperienced.

Hochschild (1983) argued that workers who are required to align their feelings with organizational norms and guidelines do emotional labor. Often, emotional labor is defensive. One of Hochschild's classic examples is how flight-attendants learn to suppress negative feelings and promote positive ones, such as when they smile in the face of abusive customers. To cope with the resulting emotive dissonance, workers sometimes vent their true feelings in a safe space and manner. Other service workers find that positive coworker relations protect against the negative effects of workplace mistreatment (Sloan 2012). Teleworking bill collectors are encouraged to handle their emotional distress by using Freudian coping mechanisms, such as making jokes at the debtor's expense (to colleagues), or by releasing their anger at abusive debtors by cursing and banging at their work desks after a call, or even during a call, with the mute button on (Sutton 1991). Police officers, who learn to present toughness and stoicism in the face of pain, defend themselves against emotionally wrenching situations by viewing the public in a detached manner, or by heavy drinking, cursing, and anger displacement (Martin 1999).

Cognitive labor has received less attention in research on underappreciated dimensions of work because a job's mental tasks are rarely hidden like emotional labor. Daminger (2019) defines cognitive labor as anticipating needs, identifying options for filling them, making decisions, and monitoring progress. Her household study finds that cognitive labor is essential to many day-to-day tasks, because without foresight, planning, and deciding, "no meal is made, no dentist appointment scheduled, and no daycare center selected" (p. 610). Cognitive labor is taxing but often invisible to the people who are doing it, because it is neither physical nor emotional. Cognitive labor is more explicit in dangerous forms of service work, such as sex work, because risk management is imperative. As one sex worker told ethnographer Travis Kong (2006): "you must be smart; otherwise you will die very soon" (p. 417). To avoid confrontations, sex workers reject seemingly dangerous clients without offending them, for instance by claiming they are unavailable, or by marking up the price. In more conventional workplaces that exhibit homophobia, lesbian workers might develop "practices of survival," for instance by masquerading as heterosexuals by wearing a wedding ring or claiming to have a boyfriend (McDermott 2006). In construction work, cognitive self-defense practices are necessary because regulations and management systems make laborers responsible for their own safety; they are held accountable, judged, and sanctioned for their ability to protect themselves and others from injury (Eaking 1992; Gray 2009).

The literature reveals that defensive practices at work are not new. Sex work, which is rife with risks, is possibly the world's oldest profession, and policing has always been dangerous. Conventional taxi-cab drivers also face considerable threats on the road, and frequently encounter runners, robbers, and attackers (Gambetta and Hamill 2005). But defensive labor is increasingly relevant to researchers, as the golden age of stable full-time employment (Hobsbawm 2020) has been sidelined in a cultural risk shift that makes work precarious and citizens responsible for their own safety.

The Risk Shift: Precarious Labor and Worker Responsibilization

Labor precarity and worker responsibilization are long-standing features of market economies. In the United States, most jobs were precarious until the end of the Great Depression (Kalleberg 2009), and perceptions of individual responsibility were central to the asceticism of Protestantism (Weber 2013) and the self-interested behavior of economic actors (Smith 1937). The contemporary global trend of firms and governments shifting welfare and risk management responsibilities onto citizens grew out of social and political reactions to the postwar expansion of the social safety net and regulatory controls. Feminists, leftist economists, and others critiqued the welfare-state system as technocratic interference in people's personal affairs, while conservatives claimed that welfare support disincentivizes people from taking care of themselves (O'Malley 2009) and hailed competitiveness and individual responsibility as personal virtues (Standing 2011; Vallas and Prener 2012). The rise of mass media also made it difficult for nation states to maintain that they are able to protect their citizens from harm, and one solution was to shift risk management responsibilities onto citizens (Garland 1996). In the United States, cuts in benefits and the replacement of welfare programs with workfare shifted people into employment (Kalleberg 2009), while business-friendly deregulation generated pervasive economic insecurity for workers, as seen in recent decades' jumps in income volatility (Hacker 2019).

In the Global North, citizens are generally free to do as they like, but they are governed by institutions for labor, health, and security (Beck 1992), which tell people that they bear the consequences of their actions (Lemke 2001), as there are no rights without responsibilities (Giddens 2013). That is, people are free, but constrained by risk management, as precarious work grows (Kalleberg 2009) and responsibilization logics pervade social life (Shamir 2008). In labor markets, the unemployed or under-employed are told to improve their market value through entrepreneurialism (Walther 2005; Gill 2010; Gray 2010) or professional networking and training (Boltanski and Chiapello 2006; Standing 2014). Jobless men and women have to "earn" welfare support by attending job-seeking courses (O'Malley 2009) and if there are no jobs, they are encouraged to create one for themselves (Walther 2005; Gill 2010; Gray 2010). People who do risky work are instructed and sometimes required to manage professional hazards on their own (Eakin 1992; Gray 2009), so that management can cut costs and shift the responsibility for accidents and death to "careless" workers (Beck 1992; Barnetson and Foster 2012), e.g. if they fail to use safety equipment (Eakin 1992). In the face of complaints, employers can say that workers willingly accept the risks involved by "choosing" to work at a construction site rather than, for example, a cafe.

This socio-political context has paved the way for a new, highly cost efficient way of managing work. The "platform economy" differs from conventional markets and corporate hierarchies. Firstly, workers are typically classified as independent contractors, not regular employees, and are thus made responsible for their own welfare and productivity (Dubal 2017). Moreover, they are much more dependent on the unpredictable pulses of passenger demand, in contrast to conventional firms where the company manages customer relations. This dependency increases their precarity. Secondly, workers have increased autonomy in how they organize their work lives (Schor et al. 2020). Drivers work on their own schedule ("drive when you want"), own the means of production ("drive your own car"), and work on their own terms ("as much or as little as you want," "only you decide ... where to drive"). They are, in sum, their "own boss" and exercise "full control" of their jobs (Lyft 2016; Uber 2016). This narrative presents workers with a faux choice between precarity, responsibilization, and autonomy on the one hand, and safe but rigid working conditions on the other. One possible reason for the persistence of this discourse (Vallas and Prener 2012) is that

workers and worker advocates lack the conceptual tools to critique structural workplace risks. Defensive labor is useful here, as it elucidates the emotional and cognitive types of self-protective work that is required in risk-ridden sectors.

Research Methods

We study working conditions in the growing platform economy. As the U.S. ride-hail market is arguably the platform economy's most developed sector, we decided to interview drivers who work for two dominant ride-hail companies: Uber and Lyft. We do not distinguish between the two companies in our analysis because most of our participants worked for both, and because the vulnerability issues we document are general to the sector. We conducted 32 semi-structured interviews, each lasting between 45 and 120 minutes.

Interviewees were recruited through the platforms, on social media and ride-hailing-focused websites, and by snowballing. We asked potential participants to suggest a time and place for an interview, and informed them that they were free to reschedule or cancel the meeting at any time, for any reason, at zero cost. The research was approved by our respective Institutional Review Boards. Interviews were conducted in person in New York City (14) and Boston (17), and one Boston driver was interviewed by Skype. All interviews were audio-recorded, transcribed, pseudonymized, and coded. We also asked participants to complete a demographic survey. Three of the 32 participants were female, and the age range was 22 to 59. Eleven were White, ten were Black, six were Hispanic, three were Middle-Eastern, one was racially mixed, and one declined to identify a race/ethnicity.

We compiled an interview matrix with questions such as: in your experience, what have been the main benefits of working as a driver? Has your view of ride-hailing changed over time? What are your concerns about this job, if any? Are some problems more common than others? Have you ever had to reach out to the ride-hailing company? Have you ever felt unsafe? We always asked follow-up questions when deemed appropriate, and probed for details and specific examples. The benefit of this approach was that we could adapt question order to participant responses and create the semblance of a naturally evolving conversation.

Interviews were analyzed in sequential steps of open and focused coding (Emerson et al. 2015). We first developed basic descriptive categories around narratives of self, platform goals, economic practices, and their positive and negative experiences in the platform. As evidence of key vulnerabilities emerged from the data, we agreed that this finding warranted analytical focus. In subsequent meetings, both electronically and in person, and in several research memos, we discussed our participants and their relevant quotes and experiences until we reached full coding consensus.

Findings

Threats from Strangers

Ride-hailing companies have a great deal of information on the people who use their apps, but when drivers get a request, they only see a first name, the passenger's rating, and sometimes a photograph that may or may not be accurate (Rosenblat and Stark 2016). This information void makes some drivers feel unsafe. Isabelle, a 31-year-old White Brazilian-American with a Bachelor's degree from Boston University, had an experience that was particularly frightening because she did not know anything about the passenger.

I go to the address. I get there, and it looks like an abandoned house. I was like, oh this is strange. So I made sure my doors were locked ... and I'm waiting and I'm waiting, and ... the person knows I'm there. And then, nothing, nothing. I called three times, nobody picks up. I had my pepper spray between my legs, just because of that feeling I had.

A pickup request from a faceless client sent Isabelle into a neighborhood known for its high crime rates. Sitting next to an abandoned house, she felt isolated and vulnerable. Isabelle's location was known, but she had little information about the passenger. She thinks the ride-hail companies' filters are insufficient, and many interviewees expressed a similar sentiment. As Jessica, the Black 41-year-old mother introduced earlier said, "I'm just picking up total strangers on the street, you know?" Jessica learned that one uncomfortable experience might lead to another, as drivers and passengers are sometimes reconnected.

I [drove] someone [home] from the club, maybe after 2 [am] ... he's like, 'You want to make some extra money? ... you know, come back to my place' ... I said, 'No, I'm sorry. I've made enough. I'm all set. I'm not interested.' When he got out he still wasn't taking no for an answer. He had me wind my window down a little ... and he's like, 'you sure, you know, you sure you don't want to come back?' ... I got him again, but he wasn't by himself this time. My heart was pounding when I saw him, when I saw the picture. I said, 'oh my God, this is the same guy.'

A passenger took advantage of the intimate space of a car to proposition Jessica. When she got a second request from the same guy she felt vulnerable and was relieved to see that he had a female companion. Jessica did not know that she could avoid another match with the man by rating him low. Drivers like her have to learn how to deal with danger, while navigating platform constraints; simply rejecting passengers that they deem unsafe will generate cancellation data, which might, as we shall see, create problems down the road. Thirty-five-year-old Oybek, in New York City, is one of several drivers, including Isabelle, who decided to stop driving on weekend evenings to avoid drunk passengers. He gets teary-eyed as he explains:

Yesterday I had five guys from Holland ... once they get in the car, they start to make fun of me ... they're drunk, what I can do? So I just kept driving and trying not listen to them. But ... I can understand a little bit of the Dutch language. They start to make fun of me, they were laughing. ... 'Oh, you are African?' I said, 'Why you think so?' 'Your skin is...'

On another night, Oybek had an intoxicated passenger who threw up on the door and window of his car, resulting in an emergency car wash. "Every time, I am afraid when drunk people get into my car." Oybek was demeaned and hurt by racially abusive passengers, and worries that drunk passengers will damage the vehicle he depends on to make a living. Although demand is high on weekend nights, Oybek decided that it is not worth the risk.

Isaac, who is 27 and originally from Puerto Rico, has a degree in car mechanics. We interviewed him in a fried chicken joint in Boston, where he occasionally meets other drivers to learn "how to get your rating up." Isaac "loves" driving cars and is closing in on 1,000 rides for Lyft, a company he likes enough to wear its pink t-shirt, a point he makes himself ("they don't pay me for this"). But some of his rides have been dangerous, and one stands out.

[My passenger] lost his mind in the car. He was yelling at his girlfriend. He put his hands on her ... he was yelling at her and just mad at the world ... he threatened to hurt other people. He [said he was] gonna go buy a gun and kill people. That was the first time I ever heard anyone say that. A lot of things were running in my mind.

Isaac was distraught by being up close to someone who posed a real threat to himself and others, and went to a nearby police station. Officers were convinced by his report and apprehended the man. Isaac felt responsible as a citizen, but also as a driver -- his passenger was in danger, and he

took action.

Thirty-three-year-old Boris, who came to the United States from Russia in 2005 "for better economic opportunities," has also felt physically threatened by his passengers.

There were three of them ... and I was like, what is the address? He is like, no, no, I'm gonna give you directions ... I dropped off the first, the second and [finally, the] third guy ... he was like, why you giving me the attitude? I was like, I don't give you the attitude ... he left the car, left the door open and was just standing next to his house, just eyeballing me trying to create a conflict. So I had to step out, close the car ... this guy in the back, he was looking for a fight.

The passenger controlled the ride by giving directions, and by creating a tense situation and challenging Boris to a fight, he displayed his physical prowess, perhaps in an attempt to dominate the situation. Boris mitigated the threat by sticking to his driver script. He brought the passenger to his destination, closed the door, and drove off.

Some drivers get stuck in situations they can't get out of. Hector, a 31-year-old Hispanic college graduate, accepted a request and soon had "four young men in hoodies" entering his car, which made him wonder, "am I going to get robbed?" Hector says the ride itself went well, "until they wouldn't let me go ... for like an hour."

One guy would get out, he would run to wherever it was and then come right back. And then I'd go to another and then one would get out, or they would swap and pick someone else up or someone with a hoodie would be waiting outside and they would meet up and then come back in the car. I was on a drug run.

Hector was eventually directed to pick up a fifth passenger. "The new guy we picked up, he was a little older and ... was running the show." Hector followed the man's directions until they arrived at the destination. The older man jumped out and approached someone who "looked like he was up to no good." Hector demonstrates the discrete drug hand-off handshake that the men exchanged before the passenger returned to the car, asking to be brought back to his original location.

Drivers say the lack of passenger information makes the prospect of picking up strangers more ominous than it needs to be. They also say that platform rules and opaque algorithms make it difficult to avoid unwanted passengers. Most rides are unproblematic, but the exceptions are sobering, and a majority of our participants have experienced distress at work, for instance due to racial abuse, threats of physical violence, or frighteningly erratic passenger behavior.

Defensive labor

Drivers must manage emotionally challenging episodes for their own safety and in order to do their jobs. For our participants, that defensive labor is often repressive. Like sex workers who hide their disgust in client encounters (Kay Hoang 2010) or flight attendants who meet rudeness with good humor (Hochschild 1983), drivers hide their distress. Hector, who we just heard from, felt unable to escape the drug-run he was part of.

I honestly wanted to say to all of them, 'get out, I'm not doing this' but didn't know if they had weapons or not and I couldn't tell from their baggy sweatpants or hoodies if they had anything. They could be carrying knives ... and then there's no photo. I don't even know who was the account holder.

Hector's personal vehicle became an unsafe space that was temporarily dominated by drug dealers, and there was no way out other than hiding his anxiousness and waiting until his passengers were

satisfied. Threats from strangers are rare in our data, but most of our participants have had at least one troubling experience and generally see their cars as unsafe spaces.

Defensive labor is also cognitive. Several drivers have developed concrete strategies for handling difficult passengers. Karim, who is 37 and originally from Egypt, says it is imperative to "control" "drunk" or "crazy" passengers.

I [had] two in the back, one in the front, and the one in the back here, he hit the door ... I [turn] the volume down tell him buddy, be careful, don't do this again. Do it again I tell him, any other hit again, I'm going to kick you out right now. You have to be serious ... I pay for this car, not the company.

Karim's anecdote suggests that although defensive labor typically reduces risk, it can also create more of it; Karim was alone in the car with three passengers and the consequences of an actual confrontation could be disastrous.

Other drivers actively avoid confrontation. They explain that quietly enduring a difficult ride is not a fearful instinctive response, but a strategy. One case in point is 33-year-old Rafael, who came to Boston from Brazil in 2012. He explains in broken English that he has had screaming passengers and drug use in his car.

When [the] customer entered my car, I smell the drugs. Cocaina ... he [snorted] in the car. But what of it? Call police? I don't know. When [the] customer is danger, stay quiet, quiet, drive, thank you, bye-bye ... I had [an]other problem when four people start to [scream at each other]. But I am quiet. Other drivers [might say] get out. Me, me no.

Rafael's risk-reduction strategy is to "stay quiet" and finish the ride. By removing himself from the passenger's personal space, he avoids escalation.

James, a 28-year-old African-American, also operates with a conflict-avoiding strategy and always makes sure that he has a way to escape dangerous situations. He keeps his door unlocked while driving, and sometimes removes his seatbelt.

If somebody's behind me and I see them reach something and they try to stab me ... to get out the car and take off the seatbelt while taking a knife is hard. If I take one [hit] and get out the car I can probably survive ... I just never take that possibility out of the picture. So at night when I'm picking drunk people up and the guy's a little sketchy, I'll take my seatbelt off. The thing will be beeping [but] I feel safe. [One time a passenger] sat in the front. It was too close, it was 3 AM, he was on the phone, he was jittery. I took my seatbelt off.

James, who is formed by a life in a tough Boston neighborhood, assesses his passengers and trusts his instincts. Without a seatbelt he will be more vulnerable in traffic accidents, but a "jittery" late-night passenger is in his judgement a more serious threat, and he feels safer with an escape route. Thomas, a White 27-year-old who up until recently worked in the Air Force, also has an exit strategy in case "anything serious" happens.

[From behind] they have a perfect opportunity to hit you or do whatever where you can't defend ... I would probably be exiting the car myself ... my chances of having a serious altercation are a lot less if I'm facing the guy, you know?

Thomas' strategy for conflict avoidance is to stay alert and when necessary, move quickly out of the car and create space between himself and his passengers. For drivers like Thomas, ride-hailing momentarily converts his personal car into a quasi-public and vulnerable domain.

Some drivers purchase equipment to protect themselves. Isaac has installed a camera in his car in part because ride-hail companies prohibit weapons.

All you got is your hands. But I have a dash cam ... I had an experience before ... I was able to catch some footage and I gave it to the police. I picked up this female one time and her ex-boyfriend was stalking her. And he tried to get in my car. But I just drove off. I had to speed off. Nothing, nothing happened, but it was like, yeah, maybe I should invest in a dash cam.

Isaac suggests that a digital eye will mitigate risk, for himself, his vehicle, and for his passengers. Defensive labor rendered him an agent of surveillance. Jessica does not have a camera installed but has weapons in her car. She says that she is in "danger" because she is "picking up total strangers" and needs to be prepared.

You never know, you know? ... somebody might just know that you're there to pick up someone, and they jump in your car, and they could easily assault you, rob you, or whatever. God is protecting me ... [and] just in case I have to defend myself ... I have a mace [and] I have a box cutter knife, you know because I work, my job requires it ... I had [the mace] since I started working for Lyft. I never had it before.

Picking up passengers across Boston, Jessica is exposed to an eclectic mix of people, and although most of them cause no problems, some of them will, and the threat is serious enough to warrant weapons.

Threats from management

Our participants value autonomy. As 32-year-old Adam says, "you have no boss, and flexible time. I think that's the best part of it." In return, workers get precarious labor conditions (Schor et al. 2020). Drivers work in what Vallas (2018) calls an "evaluative infrastructure" where they can be deactivated at any moment, for instance due to subpar performance data, passenger reviews, or updated vehicle requirements.

Drivers have to manage the emotional toll of precarity to get on with the work. Karim started working for Uber and Lyft about six months after he lost a part of his left leg after a blood infection; driving suits him because he can sit. He has completed more than 2,000 rides for Uber alone, but was recently put on hold after passengers gave him low ratings.

The hold was two days, until they say [we're] investigating. After this, they say, oh we can't continue ... I lost my job.

One passenger said Karim "was trying to be her friend," another said that he spoke about religion, a third said that his brand new was "very dirty." Karim, who also gets a lot of positive reviews and now works for Lyft, disputes the complaints and is frustrated that passengers have so much power.

He [the passenger] like happy, give you 5. If he's not happy, give you 1. [He won't] lose anything, but who pay for this? Me ... like pay for it, completely lose my job ... maybe the only job I can do.

Drivers must defend themselves against textual attacks. Reviews pile up and patterns of prejudice can lead to deactivation, as it did for Karim.

Calvin, 26, who is Black, was also deactivated by Uber. During a ride, he handed a Lyft coupon to his passenger, who turned out to be an Uber corporate employee. During the next ride, the app suddenly "shuts down." And just like that, they also shut down his job. "I [asked] them over and over again, and they said, you know, we're sorry, zero tolerance policy, we can't help you." Drivers are allowed to work for Uber and Lyft at the same time, and most do, but Calvin did not know that Uber prohibits distribution of marketing material during a ride. The ride-hailing market is fickle, characterized by changing prices, vehicle requirements, rating thresholds, and recruitment campaigns,

and workers are responsible for knowing the fine print.

Bobby, who is 43, White, and drives in New York City is keenly aware of the deactivation threat because Uber keeps sending him warnings.

I'm getting like emails stating hey your cancelation rate is [around] 25%. Our top drivers are 5%. If you want to keep using our services or app, you need to improve.

Bobby only drives occasionally because a full-time commitment to ride-hailing would generate too much wear and tear on his SUV. "It's worth taking the risk to get deactivated," he says. It is notable that while Uber told Calvin they have a "zero tolerance" policy, the ride-hailing company is in other cases vague about its red lines, possibly because uneasy drivers are easier to control. While Bobby did not seem to care about the deactivation risk, others will. James, for insurance, says the deactivation threat affects his work. He would like to keep a weapon in his car for self-protection, as some drivers do, but says it's too risky.

[A woman] can get away with having something in the car like, 'I'm an Uber driver and I feel unsafe.' Me, I can't do that ... you have to understand, I'm a Black guy ... I guarantee if I had like a little bat inside my car, a customer would ... report it ... so I don't even take that chance.

James says prejudice against Black men shapes how passengers view him. The presence of a weapon will lead to customer complaints, platform deactivation, and police investigations. The experiences of James and the two deactivated drivers -- who are Black and Northern African -- suggest that drivers of color face indirect threats from management due to passenger biases, and that in a regulatory gray area, White drivers have more room for maneuver. Dubal (2021) argues that although Uber and Lyft claim to uplift minority communities because many of their drivers are of color, the two companies contribute to a new racial wage code, by lobbying for substandard and detrimental labor standards for the same workers. Our findings suggest that drivers of color also face particular workplace vulnerabilities.

Drivers are vulnerable to superficial damages to their assets, which may hinder income generation. Several drivers recalled cases of vomiting inside their vehicles, which leaves a mess to clean and a stench that can affect ratings. James again explains that there is a system for reporting damages to a car. In one case he reported vomiting, with photographic evidence, and received \$73 for cleaning. This did not, however, cover the opportunity cost of being sidelined. In another case a passenger left behind a foul odor, which is difficult to document.

[One passenger] literally smelled like a dumpster ... when he gets out I put all the windows down, I spray, it still smells ... after like two hours I started working but I had to let it air out. It was bad, bad. That was in the morning too and it was on a Saturday so now I'm missing time because my car smells.

James had to forego the earnings of a busy part of a busy day. The rating system made it too risky for him to go back on the road: "I'm probably going to get one star and if your rating goes too low you don't get rides. So you have to be clean ... your car has to smell good."

Gerald in New York City had a similar experience. He picked up a woman who exclaimed that the seat was wet. Realizing that the liquid stemmed from the previous passenger, Gerald immediately feared the consequences for his ratings and earnings.

She could have gone after me ... I felt so upset ... she said, 'It is really wet.' So I said, 'Well just go over to the other side' ... I said, 'I had somebody, they had a bottle, must be spilled wine or whatever.' I felt so bad I had to lie to this woman because I could not tell her I knew what it was ... so after I took her to where she had to go, I pulled over. I texted Uber ... I

said, 'This man urinated in my car.' ... I was so pissed because as soon as she got out I couldn't get nobody else in the car.

Pressure from the platform perpetuates threats that are particular to the transportation profession, and creates new ones. While Gerald's problem was urine in the backseat and an unpleasant cleaning task, the more salient issues were review anxiety and the opportunity cost of not being able to work. Another case in point from New York City is Larry, 54, who highlights how superficial damages can make it difficult to meet bonus goals, which full-time drivers depend on to make a living wage. Uber, for example, offered a Driver Guarantee, where drivers were promised \$50 an hour if they met certain stipulations, including accepting 90% of rides. Larry was trying to benefit from this "guarantee."

[I drove] two drunk girls and a guy ... I said, 'you know I've got sickness bags ... if you need them.' I told them right away, because I knew. Next thing I know ... the guy's head is out the window, puking out my window ... on a highway going 60 miles an hour.

Larry had to clean up, and asked his next two potential riders to cancel their requests so that they wouldn't count against his acceptance rate. Such concerns about ratings are prevalent in our sample. Uber and Lyft collect data from all rides and this information represents a threat to driver livelihoods, because the data can justify sanctions and deactivations.

Drivers face various threats from management. One salient concern is passenger ratings and measures of platform participation, which the ride-hail companies draw on when they sanction drivers. The threat of disciplinary action is made salient not by particular platform rules, but by the ambiguous, sudden, and seemingly arbitrary manner in which are enforced, from a distance, without a meaningful path for complaints and deliberations. Moreover, existing safeguards fail to protect drivers from undue expenses because they exclude opportunity costs, which are considerable, especially for drivers who strive to meet fixed platform goals in order to make a living wage.

Defensive labor

Several drivers protect themselves against passenger complaints by collecting their own data. Karim explains:

I have this camera. Why? Because someone can report me, say something ... your car [is] not clean. You [are] aggressive. You drive fast, sexual abuse ... I have this because if someone say something, am I going to lose my job? No. Tell me which [ride]. [I'll present] the video.

Amir experienced a situation where the company used its own data against him. In his judgement, this makes his ability to work in the ride-hail market so precarious that he needs to gather evidence of his work performance. Bryan, a father of four, also plans to get a camera "to protect" himself.

[The passenger] could say anything. You are still going to have to answer to whatever they say. I mean you have to disprove the accusation, how are you going to do that?

Amir and Bryan prepare for future complaints by generating photographic evidence. In a platform where dissatisfactory customer data might lead to deactivation, they worry that they are guilty until proven innocent.

Boris suspects that Uber will in some cases withhold his payment. Once he was driving late at night in Boston and accepted a request without knowing the destination.

It was 4:30 at night. It was Friday or Saturday ... I came into the location. I see the name [on my phone]. Let's call him Frank ... the customer jumps in the car, and it's a lady. [She says] I need to go to Connecticut. It was two, two fast hours to go there. And we're talking about

\$500 fare ... and the first thing that comes to my mind ... I'm actually spending someone else's money, \$500, to transport this girl to Connecticut. And what's gonna happen next? If they will dispute, I'm gonna lose 100% of the money. Uber is not gonna pay for it ... I had to obtain his copy of the driver's license [to verify that he was the one who ordered the ride].

Boris did not expect Uber to back him in a dispute and decided he had to protect himself against incurring substantial economic costs. Isaac has so little trust in Uber that he no longer drives for them.

Let's say a passenger was to lie. 'I didn't take this ride,' or something. [Uber] will give the money back to the passenger [and] take it away from the driver. And they won't tell you. So you'll be, like, what the hell? And you have to go through your whole log. Okay, let's see where I didn't get paid. And I got tired of that, of them just taking my money. Money that I worked hard for. That's when I really quit doing Uber.

Isaac alleges that Uber stole from him, because passengers falsely claimed that their ride never happened. To defend against such theft, drivers must document that they did in fact do the work.

Conceptualizing Defensive Labor

Threats from strangers and management make workers adopt defensive practices, which have emotional and cognitive dimensions. In order to do their jobs, drivers need to regulate emotions such as fear, anxiety, anger, and disgust. They also need to develop self-protection strategies, for instance by collecting data, creating protocols for handling dangerous passengers, and by placing weapons in the car.

In Figure 1, we conceptualize defensive labor as it appears in the ride-hailing economy. The figure draws on interview data and is not a precise measure of the logic of defensive labor, but it represents how our participants deal with workplace risks on emotional and cognitive dimensions (see Table 1 for examples). Emotional defensive labor is expressed as a need or desire to manage or control an emotional response to a perceived threat. For example, verbal abuse from a passenger (step 1) generates an emotional response (step 2) which the driver attempts to regulate (step 3). Cognitive defensive labor is expressed as strategic efforts to mitigate risks. For example, the risk of being evicted from the platform based on inaccurate ratings (step 1) generates a concrete problem that can in theory be solved by presenting refuting evidence (step 2), which is accomplished by installing video cameras (step 3).

Figure 1. The Logic of Defensive Labor's Emotional and Cognitive Dimensions.

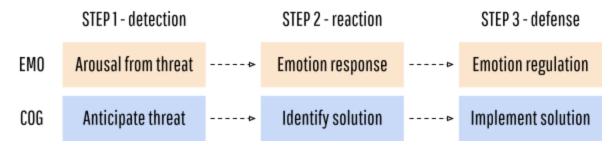


Table 1. Defensive labor.

| Table 1. Detensive labor. | | |
|---|---|---|
| DEFENSIVE LABOR | | |
| Threats | Emotional dimensions | Cognitive dimensions |
| Verbal abuse (e.g. racism, sexual harassment) | Stay calm, repress emotions | End the ride early? Report passenger? Give a low rating? |
| Economic damages (e.g. theft, deactivation threat) | Cope with feelings resulting from pervasive uncertainty | Collect data on work performance and customer interactions |
| Physical violence (e.g. confrontational and controlling passengers) | Reduce tension, be alert, be assertive, act tough to deter misbehavior | Prepare vehicle escape (e.g. by removing seat belt) , access weapon |
| Potential for low rating (e.g. due to an unpreventable incident) | Maintain positive rapport with passenger, but don't be too friendly (can lead to harassment complaints) | Control the narrative of the ride (e.g. claim the urine from previous passenger is "probably just water") |
| Superficial damages (e.g. bodily liquids, unpleasant smells) | Regulate disgust, anger, worries about opportunity costs | Remove or cover all traces to prepare vehicle for the next ride |
| Erratic passenger behavior in traffic (e.g. shouting passengers, drug abuse in car) | Stay calm, alert, focused on driving | Complete the ride, or tell passengers to exit |

Defensive labor captures emotional and cognitive dimensions of risk management at work. The concept might help workers and worker advocates complicate managerial framing and form a more accurate picture of what work in contemporary labor markets looks like for their participants. Spin doctoring was always a part of the cultural changes and deregulatory steps that have over the past 50 years made work precarious and workers responsible for their own safety (Vallas and Prener 2012). For example, workers who get injured are dubbed "careless" (Barnetson and Foster 2012), or are sanctioned for failing to take individual responsibility for their own safety (Gray 2006), and precarious labor markets are framed as sites where individual agency can unfold (Vallas and Prener 2012). On Uber and Lyft, worker responsibilization is indeed framed as liberating, and it is suggested that the drawbacks of working for such platforms are unfortunate albeit unavoidable consequences that "comes with the territory," as one participant said, as if the only way workers can gain autonomy in their jobs is to accept a situation in which they are on their own, in the face of considerable risks. Our findings suggest that rather than granting workers self-determination in their professional lives, platforms limit worker agency. Drivers are indeed free to turn off their apps whenever they want, but their working conditions are financially and socially constraining. Instead of providing the stability and safety that people need to live autonomously, gig workers are served a suffocating kind of liberty that puts their wellbeing at the mercy of passenger civility, opaque algorithms, and volatile passenger demand. Defensive labor helps elucidate this reality, and the need for structural approaches to risk mitigation. In the case of bill collectors, flight attendants, and policing, workers receive training on how they can protect themselves in difficult situations, and thus, at least some of the key risks are identified and discussed (Hochschild 1983; Sutton 1991; Martin 1999). But the particularities of risk management are more diffuse in the case of sex work, ride-hail driving, and other under-regulated jobs. We hope that by documenting and theorizing the risks of ride-hailing, and the defensive work that drivers need to do, platform managers will be made responsible for reducing workplace threats and the need to do defensive labor.

Defensive labor's analytical focus may also help researchers further detail inequality patterns in the labor market, and in particular, the ways in which precarity and responsibilization logics affect workers on the ground. Our empirical findings add to existing research on inequality within specific platforms (Ravenelle 2019; Schor et al. 2020) as our evidence suggests that in the ride-hail sector, women and people of color are uniquely burdened by defensive labor. Jessica, for example, was propositioned by a late-night customer, who took advantage of being alone with her in the confined space of a personal vehicle. For drivers of color, one salient burden is racism. James felt unable to have a weapon in the car because he would get in trouble with the police if he did, the two deactivated drivers in our sample are both of color, and at least one driver was racially abused. These experiences of sexual harassment and racism suggest that vulnerable workers are more likely to be abused. Ken said that the reason he is not concerned about dealing with strangers is that he has a military habitus: "I am very well trained so you know, people usually catch that vibe from me." As we have seen above, most of the drivers we interviewed are not so lucky, and instead have had to come up with tailored defense strategies and coping mechanisms. The burden of doing defensive labor is also likely to be heavier for full-time drivers, who are more dependent on the income (Schor et al. 2020). Sutton and Rafaeli (1988) found that grocery store workers with long lines of customers are less able to do emotional labor as instructed. Similarly, in the ride-hail economy, fatigue might impair workers' ability to do defensive labor, which may in turn intensify risks.

Concluding thoughts

Drawing on interviews with 32 Uber and Lyft drivers, we found that although most ride-hailing trips end without problems, troubling experiences are common. Drivers face bodily and emotional threats from strangers (e.g. sexual harassment and threats of violence), and financial threats from opaque managers (e.g. the ever-present threat of being deactivated). In response to these threats, drivers engage in defensive labor, which has emotional and cognitive dimensions. In the face of verbal abuse and physical threats, they implement risk-reduction strategies. To protect themselves against inaccurate reviews and deactivations, they collect data. Our findings suggest that our participants face numerous vulnerabilities in their working lives and that they are burdened with dealing with them. In order to do their jobs, they take on emotional, cognitive, and financial costs of risk-reduction.

As noted, self-protective practices at work are not new. Sex workers, policemen and women, taxi drivers, and employees in the service industry face various kinds of threats that they need to overcome in order to make a living. But the need for defensive labor is amplified by the continuing risk shift and the growth of the platform economy, as traditional vulnerabilities are supplemented by new ones. Conventional taxi drivers, for example, face threats from strangers, and like ride-hailing drivers in our sample, need to protect themselves against physical assaults (Gambetta and Hamill 2005). But ride-hail drivers also face unique threats from both passengers and managers, which sometimes intersect, for instance as inaccurate reviews can lead to lower earnings and even platform deactivation. While taxi drivers might lose their licences by breaking rules, if found guilty following a court hearing (TLC 2020), a ride-hail driver can be permanently booted off their labor platform at a manager's (or an algorithm's) whim, as two of our participants experienced.

Defensive labor is arguably symptomatic of the changing working conditions in Anglo-Saxon economies. The continuing individualization of citizens has made prudentialism a central part of life and work, but people are also encouraged to take risks (O'Malley 2000). That is, they are first told to live responsible lives by assessing their options based on available information, materials, and

practices, and second, they are told that the cultural ideal is the entrepreneur, the self-made man who ventures into the unknown and reaps the rewards of breaking new ground. In the growing platform economy, workers often wrestle with a nasty combination of the two. Firms like Uber and Lyft promote an "entrepreneurial ethos" (Ravenelle 2019), and although risks are abundant, as our findings suggest, there are no real rewards in a market where the median income is around \$8.50 an hour (Zoepf 2018). Drivers are told to accept risk, not because it may lead to substantial rewards, but because it is unavoidable for anyone who wants to participate in the present labor market.

Finally, we reiterate that while our research was conducted on the East Coast of the United States, the continuing individualization of citizens that underpin precarity and responsibilization logics are undoubtedly global forces (e.g. Fourcade-Gourinchas and Babb 2002), and so are the hardware and software innovations that enable digital reorganization of work (Sundararajan 2016). Uber operates in dozens of countries, and often faces strong competition from local ride-hailing companies. Examples include Didi Chuxing in China, which acquired Uber's operations there in 2016 (Abkowitz and Carew 2016), and Ola, Go-Jek, and Grab, which are headquartered in India, Indonesia, and Singapore and have millions of active drivers (Statista 2021). Research on platformization in China suggests that for taxi drivers, ride-hailing apps like Didi perpetuate and intensify existing vulnerabilities and create new stressors (Chen 2018), while in South Africa and Kenya, drivers face extreme precarity, which they mitigate by maintaining alternative sources of income (Otieno et al. 2020). These cases suggest that the logic of platform labor is fast becoming a global phenomenon, and that a growing number of workers face complex and understudied workplace vulnerabilities and threats that are sometimes camouflaged as autonomy. It is our hope that in all places marked by precarity, responsibilization, and platformization, defensive labor can be a useful analytical tool for granulating the emotional and cognitive burdens of work.

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