

Worker Health and Well-being in the Gig Economy:
A Proposed Framework and Research Agenda

Melissa G. Keith
Department of Psychology
Bowling Green State University
419-372-2371
mgkeith@bgsu.edu

Peter D. Harms
Department of Management
The University of Alabama
205-348-2760
pdharms@cba.ua.edu

Alexander C. Long
Department of English
Purdue University
715-661-3662
long205@purdue.edu

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Abstract

Despite widespread interest in the gig economy, academic research on the topic has lagged behind. The present chapter applies organizational theory and research to compose a working model for understanding participation in the gig economy and how gig work may impact worker health and well-being. Drawing from past research this chapter defines the gig economy in all its diversity and advances a framework for understanding why individuals enter into gig economy. Next, we discuss how various characteristics of the gig economy and gig workers can be understood as both demands and resources that influence how gig work is likely to be experienced by the individual. To understand how these characteristics are likely to influence worker health and well-being, we draw from past research on alternative work arrangements and entrepreneurship, as well as the limited extant research on the gig economy. Finally, a research agenda is proposed to spur much needed research on the gig economy and its workers.

Key Words: gig economy; gig work; stress; well-being; occupational health; alternative work arrangements

WORKER HEALTH AND WELL-BEING IN THE GIG ECONOMY:
A PROPOSED FRAMEWORK AND RESEARCH AGENDA

For better or worse, technology is rapidly transforming work and the labor market by changing the fundamental nature of certain jobs or eliminating jobs altogether (Cascio, 1995; Cascio & Montealegre, 2016). Whether by necessity or design, workers are increasingly responding to the changing labor market by moving toward forms of nonstandard work (Ashford, George, & Blatt, 2007; Cappelli & Keller, 2013; Spreitzer, Cameron, & Garrett, 2017). One form of nonstandard work that has received limited attention in the organizational literature is “gig work” or a type of short-term contract work mediated by a virtual platform (e.g., Amazon, Uber; Gallup, 2018; Kuhn, 2016; Kuhn & Maleki, 2017; Tran & Sokas, 2017). More broadly, the gig economy is characterized by domains of work where online platforms mediate a temporary working relationship between a consumer or employer and the gig worker (Duggan, Sherman, Carbery, & McDonnell, 2020). Given the nascence of this type of work, there is limited empirical research on the gig economy and its workers, much less the impact of these work arrangements on worker health and well-being outcomes. The lack of empirical research in the organizational sciences currently available is surprising considering the attention given to this topic in the popular press – as of October 2019, approximately 241,000 Google News results turn up using “gig economy” as a key word. Notably, many of these popular press articles paint a grim picture of the gig economy (e.g., Anderson, 2019; Hao, 2019). Yet, others forward a more positive or neutral perspective (e.g., Formichenko, 2019; Muhammed, 2019; Reich, 2019) which suggests more organizational research is needed to understand work experiences in the gig economy. Such research also has the potential to shape public policy and help organizational

researchers remain relevant in the changing world of work (Ashford, Caza, & Reid, 2018; Cascio, 1995).

The aim of this chapter is to provide a better understanding of the gig economy and how gig work may impact worker health and well-being. In light of this goal, the current chapter is divided into three sections. The first section is devoted to defining the gig economy and what qualifies as gig work. We will distinguish between gig work and other types of alternative work arrangements and argue that making a clear distinction between these different types of work is essential for conceptual clarity and understanding experiences of gig workers. Moreover, we suggest that not all gig work is created equal. A recent Gallup poll found support for what they termed “a tale of two gig economies” (Gallup, 2018, p. 5). While independent gig workers taking part in online platforms may enjoy high levels of freedom and work-life balance, on-call or contract gig workers experienced less job control. Thus, the current chapter will stress the importance of distinguishing between different types of gig work when examining how these work arrangements impact outcomes of interest.

In the next section, we outline a working model that highlights important factors influencing worker experiences in the gig economy, as well as, outcomes relevant to occupational health researchers. Specifically, we suggest that one’s decision to engage in the gig economy is determined by push and pull motivations. In turn, worker health and well-being and continuation in the gig economy is influenced by demands and resources available in the gig economy, as well as, personal adaptation factors. We utilize the job demands-resources model of burnout (JD-R model; Bakker & Demerouti, 2007, 2017; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) to provide a framework for understanding the different costs and benefits likely to be found in the gig economy. Given the similarities between gig work and other alternative

work arrangements, we draw from past theory and research on contract work, temporary work, self-employment, and entrepreneurship more broadly to identify where the gig work will overlap with or diverge from this past research. We will also argue that the gig economy (like most progress) is sure to be a double-edged sword. We can easily imagine, for example, a gig worker who maintains a steady household income and enjoys the benefits of flexibility and supplementary income provided by various online platforms for gig work. This worker would likely have positive experiences from the nature of the gig economy and provide an example for the many benefits this kind of work can provide. Alternatively, it is equally viable that a gig worker may approach their gig work as a more full-time endeavor (e.g., a full-time Lyft or Uber driver) and would experience significant stress based on the precarious nature of their work; this worker might suffer from stress related to having an unreliable income, taking on substantial personal and financial risk to engage in this work, and experience burnout as a result of the many strains placed on them based on the nature of their gig work experience. Both examples that highlight “a tale of two gig economies” (Gallup, 2018) are common in the gig economy and both must be considered when discussing the nature of gig work and the relative impact it has on the health and well-being of gig workers. It is here, however, where we question the notion of “two gig economies.” Through our analysis of the gig economy, we suggest that dividing the gig economy into “two gig economies” – one good and one bad – may be overly simplistic and obfuscate the multidimensional and continuous nature of many of the factors influencing worker experiences in the gig economy as well as the constantly evolving nature of the gig economy itself.

In the final section, we summarize the framework outlined in the previous sections and offer an agenda for future research on the gig economy. The future research directions utilize our

working model to accentuate gaps in our current understanding of gig workers, worker experiences, and how such factors influence the outcomes identified.

GIG WORK AND GIG WORKERS

The Nature of Gig Work

Before delving into stress and well-being in the gig economy, we must first develop an understanding of what gig work is and who gig workers are. Gig work is defined here as a type of short-term contract work mediated by a virtual platform such as Amazon, Uber, Lyft, Rover, Upwork, Fiverr, Instacart, and so forth (see also Kuhn, 2016; Tran & Sokas, 2017). In the gig economy, individual workers sell their services to either organizations or individuals; however, the intermediary platform controls aspects of the means of production or services rendered rather than the individual worker. In exchange, the gig worker is afforded a customer base. For this reason, gig work has also been called *micro-entrepreneurship* and gig workers *everyday entrepreneurs* (Berger, Frey, Levin, & Danda, 2018; Kuhn & Maleki, 2017; Ravenelle, 2019; Stone, 2016) whereby individuals are able to reduce the risks inherent in entrepreneurial activity by keeping their “business” at a manageable size and using the intermediary platforms as built-in infrastructure. With the infrastructure in place and no formal commitment, the individual can then market their services on the virtual platform with little to no upfront risk or major capital investment. Importantly, we do not view gig work as synonymous with entrepreneurship. While also self-employed, gig work may resemble traditional entrepreneurship to varying degrees depending on the amount of control workers have relative to the gig platform (Ravenelle, 2019).

Gig work falls under the umbrella of alternative work arrangements including but not limited to temporary work, contingent work, part-time work, contract work, and freelance work

(Spreitzer et al., 2017).¹ Whereas typical or traditional employment involves long-term employment by single employer, a set working schedule, and payment via either an hourly wage or yearly salary, alternative work arrangements depart from these norms in one or more ways (Cappelli & Keller, 2013; Connelly & Gallagher, 2004; De Cuyper, de Jong, De Witte, Isaksson, Rigotti, & Schalk, 2008; Spreitzer et al., 2017). Indeed, gig work can be categorized as the newest iteration of contingent, contract, or freelance work (MacDonald & Giazitzoglu, 2020; Spreitzer et al., 2017). Each of these alternative work arrangements evolved to allow flexibility for either businesses, the individual worker, or both.

Importantly, we view gig work as a type of contingent or contract work; however, when studying the gig economy in a research context, it is important not to conflate gig work with these other types of work arrangements. There are two main characteristics of gig work that distinguish such work from other types of alternative work arrangements: the intermediary platform and the temporary nature of the contract between workers and the employer.

First, gig work is mediated by an Internet platform such as Amazon, Upwork, Uber, Lyft, Rover, Fiverr, etc. Thus, contact with the employer is mediated by this platform. Notably, the role of the intermediary platform may vary. In some cases, the mediating platform exercises a degree of algorithmic control over certain processes such as work assignments and payment. Uber, for example, uses an algorithm that matches riders with drivers efficiently based on the driver(s) location and the rider(s) location. Payment is also determined through an algorithm based on supply and demand. Other mediating platforms do not use algorithms to match workers with an employer or assign payment. For example, on Amazon MTurk, workers are able to choose what work they want to do by sorting through a number of available options posted on

¹ These terms are not mutually exclusive and are simply a list of different terms used to classify different types of working arrangements.

the platform and payment amount is decided by the consumer/employer. Another common element to (most) gig platforms is the use of worker (and sometimes employer) rating systems as a proxy for trust. That is, the intermediary platform will often allow employers to rate their experiences with gig workers and such assignments may influence the worker's ability to obtain future work.

Second, gig work involves “contracts that are as temporary as they could possibly be” (Webster, 2016, p. 60). That is, gig work may consist of work that lasts minutes or even seconds. On Mechanical Turk, for example, workers may be paid to do micro tasks that last mere seconds. Likewise, on Upwork, a graphic designer may be contracted by an organization to design a single logo. In each of these cases once the work desired by the employer is complete, the individual's relationship with that employer has ended.²

Work in the gig economy varies widely with respect to the nature of the tasks, level of skill involved, and even the working conditions. While a worker on Survey Junkie may complete a marketing survey for a market research company, a worker on Rover may watch someone's dog while they are at work. Likewise, the amount of skill or education can range from unskilled labor such as transcription or coding tasks on Mechanical Turk to skilled labor on Upwork which connects clients with skilled professionals such as data scientists, engineers, writers, web developers, graphic designers, and so forth. Such differences also impact working conditions. Whereas Uber and Lyft drivers will spend a great deal of time in the car meeting people, Mechanical Turk workers will spend a great deal of time on a computer with little work-related social contact. The key connection between these different types of gig work is that individuals are self-employed and can decide when to work, where to work, and who to work for.

² By employer, we mean the individual or organization who has requested the service or product. The gig worker and the third-party platform will maintain a relationship across multiple projects or gigs.

Gig Workers

Much like the gig economy itself, gig workers are not a homogenous group of individuals (Aspen Institute, 2019). Those taking part in this new world of work comprise a wide range of ages, races, educational backgrounds, and skill sets. Notably, many of the data sources available are based on surveys of contingent workers more generally (e.g., Bureau of Labor Statistics, 2018) or focus on individual sectors of the gig economy or specific platforms (e.g., Berger et al., 2018; Cook, Diamond, Hall, List, & Oyer, 2019; Keith, Tay, & Harms, 2017; Ophir, Sisso, Asterhan, Tikochinski, & Reichart, 2020). Such diversity in both individual workers and the gig economy at large makes it difficult to discuss the gig economy holistically. For example, men are more likely than women to participate in online labor platforms and have other full-time employment; women are more likely than men to use gig work part-time for supplemental income and sell goods online (Aspen Institute, 2019). Thus, any research on individual sectors of the gig economy may not translate to other sectors, and more research is needed to better understand who gravitates to certain types of gig work and why.

Determining how many individuals in the United States work in the gig economy, much less the rest of the world, is difficult to estimate. To begin, many estimates include other types of alternative work arrangements in estimates of gig economy labor force participation (e.g., Gallup, 2018). Moreover, gig work may not be perceived as a job (or a least a primary job) resulting in underreporting of participation (Brainard, 2017; Kuhn, 2016). Estimates of the actual labor force participation in the gig economy vary depending on where the boundaries between gig work and other alternative work arrangements are drawn, and there has been some debate surrounding whether the growth of the gig economy has been moderate or large or whether the gig economy has simply replaced other forms of work in the informal economy (Appelbaum,

Kalleberg, & Rho, 2019; Bureau of Labor Statistics, 2018; Katz & Krueger, 2017, 2019; Kuhn, 2016). With these caveats in mind, current estimates of gig worker representation are somewhere between 1-8% of the United States Workforce (Gallup, 2018; McKinsey Global Institute, 2016).

Though debatable in magnitude, growth is especially prevalent in certain developing nations such as India and Africa where jobs in the informal economy are much more common (Hruby, 2019). In developed countries such as the United States, growth in the gig economy sector tends to be concentrated in urban cities and on the Eastern and Western coasts where there is a sufficient demand for such workers (Holtz-Eakin, Gitis, & Rinehart, 2017). This could have significant implications for the economic strain experienced by those most likely to engage in gig economy labor, but the degree to which socioeconomic status might predict gig economy participation has yet to fully be extrapolated by the current research.

MODEL OF WORKER EXPERIENCES AND OUTCOMES

Undoubtedly, the diversity of gig work and gig workers poses a challenge to organizational researchers hoping to understand how these new work arrangements function and how they impact worker health and well-being. To address this, we propose a working model (Figure 1) to serve as a starting point for organizational researchers interested in studying gig worker experiences, particularly from an occupational health perspective. The working model should be viewed as just that – a working model – with room for improvement as research on the gig economy develops more fully. For example, we identify subjective well-being (i.e., general levels of high positive affect, low negative affect, and life satisfaction; Diener, 1984, 1994), psychological well-being (i.e., a multidimensional construct that include positive self-evaluations, a sense of purpose or meaning, positive relationships with others, self-determination, and environmental mastery; Ryff & Keyes, 1995), physical well-being (i.e.,

positive health outcomes such as longevity, absence of disease, and so forth), and continuation in the gig economy as potential outcomes to examine; however, there are other outcomes such as work-life balance and engagement that may also be relevant. In the sections below, we elucidate the various parts of this working model and how they are likely to influence the outcomes identified.

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Motivations of Workers in the Gig Economy

The expansion of the gig economy can largely be attributed to many technological, economic, and social factors taking place in the past fifty years or so. First, the gig economy participation (particularly crowdsourcing and freelance platforms) is the result of an increasingly flat, technologically-integrated world whereby individuals from developing countries can be employed virtually anywhere in the world as long as they have access to the Internet (Cascio & Montealegre, 2016). Economically, the 2008 Great Recession left many people, particularly those in financially strained situations, seeking ways to make ends meet, resulting in the expansion of alternative forms of employment (Holtz-Eakin et al., 2017; Katz & Krueger, 2017, 2019). As many full-time jobs disappeared due to the Great Recession and technological changes, many individuals were pushed into part-time or gig work. At the same time, organizations increasingly hire gig workers or other temporary workers in lieu of full-time workers to increase flexibility, innovation, and reduce costs associated with full-time labor (De Cuyper et al., 2008; Fisher & Connelly, 2017; Kalleberg, 2003; MacDonald & Giazitzoglu, 2020). Finally, individuals may also be drawn to the flexibility available in the gig economy.

We divide the various motivations for participating in the gig economy into push and pull factors (McKeown, 2005). Push factors are *external* forces influencing one's actions, and pull

factors are more *internal*, typically reflecting personal preferences, values, or interests (Keith, Harms, & Tay, 2019). Push motivations in the gig economy are often economically related such as a lack of sufficient income, student loan debt, family pressure, and so forth. Pull motivations may include desires for flexibility or autonomy, enjoyment, or seeking variety in one's work. Previous research on gig workers has distinguished between push and pull motivations to examine how such motivations impact other outcomes such as life satisfaction. Specifically, in a sample of Mechanical Turk workers, Keith and colleagues (2019) found that generally pull motivations were positively related to present and anticipated future life satisfaction, whereas push motivations generally were negatively related to present and anticipated future life satisfaction. Thus, understanding why individuals enter the gig economy may have an influence on important outcomes such as worker health and well-being.

Demands, Resources, and Personal Adaptation Factors

The experiences of gig workers are likely to be as diverse as the gig economy and the gig workers themselves. As such, stressors experienced in one sector of the gig economy may not translate or may be experienced differently in other sectors. We suggest that the nature of gig work and personal adaptation factors are likely to influence how one's participation in the gig economy impacts important outcomes such as well-being (i.e., subjective well-being, psychological well-being, and physical well-being) and continuation in the gig economy.

Adopting the JD-R model (Bakker & Demerouti, 2007, 2017; Demerouti et al., 2001), we organize work experiences in the gig economy in terms of job demands and resources. The JD-R model has been widely applied in the organizational literature to examine particular working conditions as either job demands or job resources. Job demands are the "physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore

associated with certain physiological and psychological costs (e.g., exhaustion)” (Demerouti et al., 2001, p. 501). Although many potential job demands exist within the gig economy, we opted to examine demands that are likely to generalize to multiple sectors of the gig economy: job insecurity, precarious work situations, alienation, underemployment, and emotional labor. Job resources then are “physical, psychological, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands as associated with physiological and psychological costs; (c) stimulate personal growth and development” (Demerouti et al., 2001, p. 501). We identify autonomy and skill/task variety as job resources, as well as human, social, and psychological capital, and tolerance for ambiguity as personal adaptation factors (i.e., individual resources) in the gig economy.

Job Demands

Job Insecurity

In the broader research, job insecurity has frequently been examined in relation to worker stress and well-being (Boswell, Olson-Buchanan, & Harris, 2014; De Witte, Pienaar, & De Cuyper, 2016; Jiang & Probst, 2017; Kinnunen, Mäkikangas, Mauno, De Cuyper, & De Witte, 2014; Vander Elst, Van den Broeck, De Witte, & De Cuyper, 2012). In a recent survey conducted by the American Psychological Association, 37% of respondents reported job insecurity as a somewhat or very significant source of work stress (American Psychological Association, 2018). The empirical research has linked job insecurity to lower well-being, exhaustion, burnout, low vigor, and turnover intentions (Bernhard-Oettel, Sverke, & De Witte, 2005; Cheng & Chan, 2008; Jiang & Probst, 2017; Kinnunen et al., 2014; Virtanen et al., 2005).

Notably, job insecurity is typically studied in the context of full-time and temporary employment whereby workers may experience job insecurity due to organizational change,

economic conditions, or coworker layoffs (e.g., Parker, Griffin, Sprigg, & Wall, 2002). In the context of the gig economy, however, workers may be engaging in gig work as a *response* to job insecurity. Moreover, job insecurity in the gig economy may be experienced differently than in full-time employment or other types of temporary employment given that gig work is understood to be permanently temporary and workers cannot truly be fired or laid off. Though workers may be prevented from finding work on a particular gig platform due to low consumer ratings, for example, there is frequently another (often similar) platform to work under. Thus, in the context of the gig economy, it is likely more appropriate to understand job insecurity in the larger context of precarious work – the job insecurity associated with gig work is inherent in the nature of the work, is always understood as such, and therefore inevitably will affect the workers’ perception of that insecurity and their ability to cope with it.

Precarious Work Situations

The experience of gig work is often one of unpredictable work hours and low wages. Because of this, many have argued that gig work is typified by precarity (Ashford et al., 2018; MacDonald & Giazitzoglu, 2020; Petriglieri, Ashford, & Wrzesniewski, 2019). Precarious work is “employment that is uncertain, unpredictable, and risky from the point of view of the worker” (Kalleberg, 2009, p. 2). Other definitions describe precarious work as having short tenure, low wages, limited benefits, and high degrees of job insecurity (International Labor Organization, 2012; Lewchuk, de Wolff, King, & Polanyi, 2003). Although some gig workers may welcome the flexibility afforded in the gig economy, there are many costs resulting in precarity (MacDonald & Giazitzoglu, 2020).

Another term that has been used to describe precarious work is *employment strain* (Lewchuk et al., 2003). Employment strain is characterized by low control and high demands as

shaped by the employment relationship. Lewchuk and colleagues delineated demands in the context of the gig economy to include a continual search for new gigs, a need to have positive reviews or ratings from costumers, and often, the balancing of multiple gigs or forms of employment. We would add that workers in the gig economy cannot forecast how much will be made on any particular day making financial planning difficult. Much like traditional entrepreneurs or the self-employed, gig workers face market uncertainty and risk; however, unlike traditional entrepreneurs and the self-employed, gig workers arguably have less control due to the intermediary platform and the power differential (Curchod, Patriotta, Cohen, & Neysen, 2019). Although gig workers have a fair degree of control over certain aspects of their work life, other aspects such as day-to-day demand for work are not under the control of the worker. Likewise, gig economy platforms often have control over how much workers can be paid or how they can be paid. According to Lewchuk and colleagues, precarious work as measured by employment strain is associated with higher levels of stress and poorer heath.

The skeptical observer would note, perhaps justifiably, that gig work may be a means for businesses to shirk responsibility. Indeed, hiring gig workers allows businesses to hire both skilled and unskilled workers without geographical constraints or costs associated with hiring a new employee such as training or benefits. Gig workers, like other types of contingent workers, are hired on demand and do not receive benefits common to full-time employment such as health insurance or a retirement plan. There is also less risk associated with hiring a gig worker, as there is no long-term contract and workers (often) have few options for recourse if payment is withheld. Moreover, the labor protection laws have yet to catch up to this change in the labor market and afford workers in the gig economy with few worker protections such as a minimum wage, workman's compensation, overtime, disability insurance, or collective bargaining (Harris

& Krueger, 2015). Together this adds up to economic risks shifting to the workers, resulting in a potentially precarious work situation for workers employed by the gig economy.

At first glance, this would appear to be largely negative for gig workers. And it is. There are certain externalities, however, that make the gig economy uniquely challenging for legislators who may want to protect workers from potential exploitation. To begin, there is some debate over whether gig workers should be considered employees, independent contractors, or some other classification entirely (Harris & Krueger, 2015; Murray & Ball, 2016). The legal definition of an employee is “a person in the service of another under any contract of hire, express or implied, oral or written, *where the employer has the power or right to control and direct the employee in the material details of how the work is to be performed* [emphasis added]” (Black, 1991, p. 363). Thus, the key distinction made between an employee and an independent contractor is who has control. The legal definition, though potentially overly simplistic, is important, as it determines what worker protections are afforded to gig workers (Harris & Krueger, 2015; Muhl, 2002). As part of The Hamilton Project, Harris and Krueger (2015) argued that gig workers do not easily fit into classifications of employee or independent contractor and proposed a third classification known as the “independent worker.” According to Harris and Krueger, this classification would afford gig workers protections currently reserved for employees such as the right to collectively bargain, civil rights protections, tax withholding, and employer contributions to payroll taxes while still acknowledging the distinction between gig workers and traditional employees.

A second complexity with the gig economy is that gig workers may be simultaneously working for multiple, sometimes competing, intermediary platforms posing difficulties for overtime and minimum hourly wage requirements (Harris & Krueger, 2015). For example, an

Uber worker may also work for Lyft. Such a person might cumulatively work more than 40 hours in week but would not qualify for traditional overtime requirements as they do not work more than 40 hours for a specific company or platform. It is also difficult to know when workers are “on the clock” – should Uber and Lyft drivers be paid for the intermediary times spent waiting for the next ride? Along a similar vein, Mechanical Turk workers may complete multiple HITs (i.e., tasks) at the same time, switching back and forth between HITs, making it difficult to know how long it took a given worker to complete an individual HIT. This makes it difficult to accurately assess the amount of time worked and, consequently, the amount paid per hour for gig work. Moreover, given the often-part-time nature of gig work and the ability to stop and start gig work at will, unemployment benefits do not make as much sense in the gig economy. For these reasons, Harris and Krueger argue that the independent worker classification would not provide minimum wage, overtime, or unemployment benefits. From the perspective of a gig worker, however, minimum wage and clearer rules concerning overtime would be significant improvements to the current gig economy where some full-time gig workers struggle to make a livable or consistent wage (Farrell & Greig, 2016; McGregor, 2018; Tran & Sokas, 2017). Importantly, past researchers have noted that though low paying, gig work may be a better alternative than other low-paying work. Berger et al. (2018) reported that although Uber drivers report low incomes compared to other workers in London (i.e., their referent), approximately half of the drivers they sampled reported higher incomes after partnering with Uber. Thus, economic insecurity within the gig economy may mirror a larger societal problem.

Taken together, many gig workers are likely to be in a precarious work situation – one where work is unpredictable and insecure. The insecurity largely stems from an inability to predict how much can be made in a particular day and increased competition in the gig economy

preventing workers from being able to work as many hours or as consistently as desired. These concerns are only exacerbated if the role of gig work increases to a more primary source of income, as opposed to the casually obtained supplementary income it is often perceived to be (Keith et al., 2019). Legally, gig workers are not considered employees and do not fit neatly into the independent contractor category resulting in few protections to buffer gig workers from potential exploitation and economic insecurity.

Alienation

Alienation refers to the workers estrangement or distancing from the products of their labor as well as the society which that labor is supposed to be servicing (Marx & Engels, 1978). This concept traces back to Karl Marx in the nineteenth century, a time when, according to Marx, the emergence of industrial cities and the correlating rapid expansion of factory work resulted in the common laborer becoming increasingly distanced from the product of their labor. This depersonalization of the relationship between labor and product was magnified with the development of the assembly line when workers became hyperspecialized in their role in the production process. The nature of factory production relies on a series of specialists contributing to a process without significant overlap in the tasks assigned to each individual worker. This physical and social isolation engendered by the burgeoning factories of the industrial revolution created a situation in which workers became increasingly disconnected from one another, as well as the products of their labor, resulting in a loss of meaning and, according to Marx, dehumanization of the production process.

In Marx's original conception, alienation was a systemic, objective reality and subjective experiences of alienation were not the focus (O'Donohue & Nelson, 2012; Fedi, Pucci, Tartaglia, & Rollero, 2016). Psychologists and other social scientists, however, have suggested that

alienation can also manifest as a social-psychological state or feeling (Seeman, 1959; Shantz, Alfes, & Truss, 2014). For example, Seeman (1959) suggested that subjective feelings of alienation are characterized by five dimensions: powerlessness (i.e., feelings of being controlled or a lack of control), meaninglessness (i.e., not perceiving one's work as contributing to the whole or as being trivial), isolation (i.e., feeling like one does not belong), self-estrangement (i.e., lacking fulfilment or a sense of identity), and normlessness (i.e., a breakdown of social norms) (cf., Blauner, 1964). Although this multidimensional approach has been popular, others have noted that some of these dimensions may be antecedents and/or do not adhere as closely to Marx's original conception. Thus, others have taken a unidimensional approach, viewing alienation as estrangement or detachment from the work and the workplace and viewing dimensions such as meaninglessness as antecedents of alienation (e.g., Ashforth, 1989; Hirschfeld & Feild, 2000). Regardless of the conceptualization, examinations of alienation at the individual level have relevance for understanding worker experiences. Work alienation has been linked to decreased well-being, job satisfaction, job involvement, and affective organizational commitment (Fedi et al., 2016; Hirschfeld & Feild, 2000; Shantz et al., 2014), and increased emotional exhaustion (Shantz et al., 2014).

The potential for alienation bears significance to many gig workers, as they are essentially the newest and most extreme form of isolated laborers who are becoming alienated both from the product of their labor as well as their fellow laborers. The online nature of many platforms in the gig economy eliminates the need for employers and consumers to know any of the workers personally and thereby removes any concern they might have had for the exploitation taking place as a result of this system. Webster (2016) argued that workers are often isolated from one another and in direct competition with each other. With limited numbers of

gigs available on most virtual platforms, workers must frequently stalk these platforms to accept a job before others on the platform can. Thus, gig workers may come to see other workers as rivals and potential threats rather than coworkers.

Another related issue contributing to feelings of alienation is that workers are not only separated or put into competition with coworkers, but they are disconnected from their supervisors as well. Prior research has shown that leaders can play an important role as a determinant of worker stress (Harms, Credé, Tynan, Leon, & Jeung, 2017) and supportive leadership is negatively related to alienation (Chiaburu, Thundiyil, & Wang, 2014). On one hand, leaders can provide guidance and support for workers and aid in the sense-making process about the meaningfulness of work. On the other hand, leaders can also be abusive, capricious, and biased. The online, algorithmic nature of gig economy platforms means that gig workers may be spared many of the negative aspects of bad leaders, but they are also unlikely to benefit from the positive roles that leaders can have as well (Harms & Han, 2019; Luchman & González-Morales, 2013). This is yet another example of how the gig economy removes many of the social and human relationships of the production process. Furthermore, decisions and assignments made by algorithms are not necessarily perceived as unbiased and fair by workers (Lee, 2018). Instead, the information asymmetries and lack of explanation can lead gig workers to believe that they are being treated unfairly or that they are not valued as an individual (Lee, 2018; Lee, Kusbit, Metsky, & Dabbish, 2015; Rosenblat & Stark, 2016). Although it is possible that advances in artificial intelligence will allow for enhanced communications designed to promote worker well-being (Harms, 2019), we are not currently aware of any gig platforms employing that approach at this time.

The relative vulnerability of gig workers to alienation will, of course, depend on the nature of the gig work. Certain types of gig work are particularly vulnerable to alienation in that the work completed is highly fragmented or hyperspecialized. For example, on various crowdsourcing platforms (e.g., Mechanical Turk), workers often complete small, repetitive tasks that are disconnected from both the client and the end product (Webster, 2016). In the flexible labor market, temporary workers (including gig workers) may be used as a form of numerical or external flexibility which permits organizations to adjust the scale of their workforce to match demand or seasonal fluctuations (Kalleberg, 2003). In such cases, the worker may be viewed as expendable (De Cuyper et al., 2008). Alternatively, freelance work or skilled work mediated by Internet platforms is less likely to separate the worker from the labor process or the products of labor as these workers maintain more autonomy and control over the products of their labor. Such work is less vulnerable to alienation and may even result in more meaningful work.

Underemployment

Underemployment is a multidimensional construct characterized by employment in jobs requiring significantly less education, experience, and/or skill than the individual worker possesses, employment in a field outside one's formal education, and/or involuntary employment in temporary work (Allan, Tay, & Sterling, 2017; Feldman, 1996; McKee-Ryan & Harvey, 2011). Such jobs are also typically accompanied by lower wages and benefits, lower status, fewer working hours available, and less job security (Feldman, 1996). Given these characteristics, it should come as no surprise that many people engaged in the gig economy are underemployed. Notably, economists and sociologists tend to define underemployment as a dichotomous variable based on income or educational attainment, often in reference to a previous job held. Feldman (1996) argued, however, that underemployment is likely continuous and is at

least partially based on perception. In the gig economy this is even more likely to be true, as people may have multiple jobs both within and outside the gig economy. Thus, although an individual gig may be characterized as underemployment, the sum of the gigs or the gig in combination with a full-time job may not be experienced as underemployment by the worker.

Underemployment has been linked to a number of negative life and work outcomes (Allan et al., 2017; Bolino & Feldman, 2000; Dooley, 2003; Erdogan & Bauer, 2009; McKee-Ryan & Harvey, 2011). Allan and colleagues (2017) found that subjective perceptions of underemployment are negatively related to meaningful work, commitment, person-environment fit, job satisfaction, work satisfaction, pay satisfaction, and promotion opportunities. Among expatriates, Bolino and Feldman (2000) found that underemployment was negatively related to job satisfaction, organizational commitment, and desire to stay. Although not all of these constructs are relevant to work in the gig economy, the trend suggests that worker well-being is likely to be negatively impacted by underemployment. Notably, different underemployment dimensions may have differential relationships with these outcomes. Friedland and Price (2003) measured four dimensions of underemployment (hours, income, skills, and status) and found that status and income were related to indicators of health and well-being.

When examining potential outcomes of underemployment in the gig economy, we urge researchers to examine underemployment as a multidimensional construct and consider the subjective experiences of the workers in addition to objective characteristics of the job. We should also bear in mind that different dimensions of underemployment may be more or less relevant to certain sectors of the gig economy and may have a differential impact on worker health and well-being. Finally, we suggest that although underemployment is likely to be prevalent in the gig economy, it may be experienced differently for those who have another job

or work on multiple gig platforms, and this also should be taken into consideration when examining underemployment.

Emotional Labor

Bliese, Edwards, and Sonnentag (2017) noted a general trend in the labor market that has seen a reduction in physical and environmental stressors and an increase in emotional labor. Following this trend, physical stressors in the gig economy are likely to be rather limited. The majority of gig work takes place either virtually or in one's vehicle. One exception is gigs involving food or grocery delivery (e.g., Instacart) which may require gig workers to carry heavy groceries or climb stairs. Whether gig workers experience environmental stressors will be largely dependent on the gig work itself. Although, workers on crowdsourcing platforms such as Mechanical Turk or consulting platforms such as Hourly Nerd likely experience few environmental stressors, ridesharing platforms such as Uber or Lyft may have many including traffic, adverse weather conditions, and car fumes. It is possible that more physical and environmental stressors will emerge when studying the gig economy, particularly physical stressors related to sitting for long hours in front of a computer or in a car (Tran & Sokas, 2017). Some have also noted the gig workers may work very long or odd hours to make ends meet (Keith et al., 2019) suggesting that a lack of a regular sleep schedule may pose a health risk to gig workers. Overall, however, gig work has followed the trend in the labor market more generally that has seen a reduction in physical stressors and an increase in emotional stressors (Bliese et al., 2017).

Emotional labor can be described as emotion regulation (e.g., enhancing, faking, or suppressing emotions) to meet occupational or job requirements as part of an economic exchange (Grandey, 2000; Grandey, Diefendorff, & Rupp, 2013; Hochschild, 1979, 1983). Emotional

labor can require effort on the part of the worker, but does not have to (Ashforth & Humphrey, 1993). Jobs that require interaction with others or that have display rules or norms that govern how one's emotions should be expressed will require some degree of emotional labor. For this reason, emotional labor may be an especially relevant job demand in service-oriented gig work in which the worker comes into direct contact with the employer.

To date, emotional labor in the gig economy has been primarily examined on ride-sharing platforms such as Uber. Many have noted that these gig workers are especially likely to experience extended contact with customers who are often intoxicated or otherwise demanding (Haskins, 2018). Emotional labor in this sector of the gig economy stems primarily from the necessity to maintain high customer ratings (Lutz, Newlands, & Fieseler, 2018; Rosenblat & Stark, 2016; Stark, 2016). For many platforms, workers who fall below a certain customer rating will be banned from the platform with little recourse (Lee et al., 2015; Rosenblat & Stark, 2016). The vulnerability created by a low customer rating creates an imbalance of power resulting in a high potential for unfair treatment and even abusive interactions (Grandey, Kern, & Frone, 2007; Rosenblat & Stark, 2016). Past research has also suggested that when people are treated unfairly, emotional labor increases and individuals find it increasingly difficult to comply with display rules (Rupp & Spencer, 2006). Thus, gig workers who experience injustice may find it difficult to exhibit the emotional displays required to remain working on the gig platform.

In the broader literature, emotional labor – particularly surface acting – has been linked to impaired well-being (Hülshager & Schewe, 2011), stress (Pugliesi, 1999), emotional exhaustion (Montgomery, Panagopolou, de Wildt, & Meenks, 2006; Wagner, Barnes, & Scott, 2014), work-to-family conflict (Wagner et al., 2014; Yanchus, Eby, Lance, & Drollinger, 2010), negative job attitudes (Hülshager & Schewe, 2011), insomnia (Wagner et al., 2014), and psychosomatic

complaints (Montgomery et al., 2006). Given this past research it should come as no surprise that many ride-sharing platforms have high rates of turnover – as high as 500% per year according to one source (Mims, 2019). Interventions created to alleviate the impact of emotional labor designed specifically at the gig economy remain largely unexplored.

Job Resources

Autonomy

Autonomy has been identified as one of the job resources in the JD-R model (Demerouti et al., 2001), and is well-established as an important buffer against job demands (Häusser, Mojzisch, Niesel, & Schulz-Hardt, 2010; Ilies, Dimotakis, & de Pater, 2010; Karasek, 1979; Lesener, Gury, & Wolter, 2019). In the organizational literature, autonomy typically involves having discretion in completing a job or task and a feeling that one has chosen to engage in that job or task (Hackman & Oldham, 1975, 1976; Langfred & Moye, 2004). Self-determination theory (Deci & Ryan, 1987, 2000; Ryan & Deci, 2000) also identifies autonomy as an important psychological need and has found support for a positive relationship between feelings of autonomy and well-being (Deci & Ryan, 2008; Karasek, 1979; Sheldon, Ryan, & Reis, 1996).

In a survey of American workers, 36% reported that inflexible hours were a significant source of work stress (American Psychological Association, 2018). Thus, for many the autonomy and flexibility in the gig economy may be a strong pull factor (Keith et al., 2019). Past empirical research also supports this notion. In a survey of Uber drivers in London, Berger and colleagues (2018) found that 82% of respondents either agreed or strongly agreed that being able to choose their own hours was more important than having holiday pay or being guaranteed a minimum wage. Likewise, 84% of respondents agreed or strongly agreed that they did not want to work for a traditional company if it meant losing the flexibility currently held.

Importantly, autonomy/flexibility in the gig economy should be viewed on a continuum and multidimensional – workers may experience varying levels and forms of autonomy or control over the work process (Ashford et al., 2018; Breugh, 1985, 1989; Cappelli & Keller, 2013; Spreitzer et al., 2017). We identify five forms of flexibility that may be relevant to research within the gig economy: 1) participation in the gig economy, 2) working hours, 3) location, 4) nature of work, and 5) payment. Gig workers who experience more control along these dimensions are expected to reap more benefits in the gig economy (Cappelli & Keller, 2013).

To begin, gig workers experience different levels of autonomy with respect to participation in the gig economy. Gig workers who feel that they have chosen to participate in the gig economy are likely to experience more positive outcomes and fewer negative outcomes compared to gig workers who feel pressured to work in the gig economy out of economic necessity or a lack of full-time employment. In support of this notion, past research on temporary or contingent work has found that job satisfaction is higher among employees who had choice of their temporary employment status compared to those who are involuntarily temporary or contingent workers (Connelly & Gallagher, 2004; Feldman, Doeringhaus, & Turnley, 1995; Holtom, Lee, & Tidd, 2002; Krausz, Brandwein, & Fox, 1995; Lee & Johnson, 1991; Maynard, Thorsteinson, & Parfyonova, 2006; McKeown, 2005). In a review of entrepreneurial research on health and well-being, Stephan (2018) found that opportunity entrepreneurs experience higher levels of life and job satisfaction and lower levels of anxiety, depression, and burnout compared to necessity entrepreneurs. McKinsey Global Institute surveyed approximately 8,000 European and American independent workers and found that people who chose to engage in this form of work were more satisfied than people who were independent workers either out of financial

necessity or those who would prefer more permanent, traditional employment (McKinsey Global Institute, 2016). Although this particular survey encapsulated many alternative work arrangements, it seems reasonable to assume that the gig economy in particular would exhibit similar results. Within the gig economy, Keith and colleagues (2019) found that workers who utilized Mechanical Turk as their primary income had lower current and anticipated future life satisfaction than workers who had another source of primary income suggesting that choice matters. Anecdotal accounts also echo these findings. One gig worker who works for a number of grocery delivery platforms (e.g., Instacart, DoorDash, Shipt, Deliv) told National Public Radio, “I tell people it’s a great thing to have, if you’re looking for extra money but you don’t *really* need it” (Selyukh, 2019).

In addition to participation, workers may have more or less autonomy in regard to deciding when or where the work is completed. If they are working out of economic necessity or in a particularly competitive market, gig workers may feel pressure to work long hours and be constantly available for work on the gig platform. Workers may also have limited control over where and when to work if labor demand is stronger during certain times or at certain locations. For example, workers in urban settings may have more options for when and how to work than more rural areas where there is less demand for their services (Cook et al., 2019). These decisions also have economic consequences as demonstrated by the gender wage gap found in a sample of Chicago Uber Drivers by Cook and colleagues. Specifically, women earned approximately 7% less than their male counterparts and 28% of this gap was determined to be explained by where trips took place; that is to say, the pay gap was partially dependent on choices made by the individual drivers such as time and location of drives (Cook et al., 2019).

Just as the gig economy varies widely, the nature of any individual gig may vary widely. Gig platforms often exert a certain amount of control over workers through use of algorithms and terms and conditions (Duggan et al., 2020; Rosenblat & Stark, 2016; Wood, Graham, Lehdonvirta, & Hjorth, 2019). Moreover, workers completing crowdsourcing tasks may engage in any number of microtasks throughout the day with different time demands, mental demands, and requirements for completion. Some of these demands and requirements may not be transparent to the individual worker at the outset, further reducing perceived control (Keith, 2019). Likewise, workers on ridesharing platforms may encounter a wide variety of people, distances, and traffic patterns throughout the day.

Finally, payment has often been a sticking point when discussing the gig economy. The gig economy platforms vary on who has control over the pricing – the worker, the platform, or the consumer. When payment is set by the platform or the consumer, workers are often dissatisfied. On Mechanical Turk, for example, payment is set by the consumer with wages that are typically low. Busarovs (2013) found that two-thirds of the Mechanical Turk workers surveyed considered themselves at least somewhat exploited. Ridesharing platforms have also been met with criticism given that the platform has control over ride pricing (Rosenblat, 2016). Even when payment is under the control of the worker, market forces may control pricing, especially as competition grows. A freelance worker, for instance, may feel obliged to under-bid their services in order to acquire certain tasks, and this would especially be the case at the onset of their freelance work in order to establish ratings and credibility as a high-quality gig worker.

Taken together, workers in the gig economy generally have more control than traditional workers and this is a job characteristic desired by gig workers. Yet, there may be less autonomy than perceived and the degree to which individuals perceive control in different areas of their

work may impact how autonomous the person feels. Many of these externalities will change across time suggesting that the degree of autonomy experienced in the gig economy may need to be examined at the within-person level in addition to the between-person level. Work is also needed to understand where worker autonomy in the gig economy could be expanded to benefit workers and how this impacts worker health and well-being.

Skill/Task Variety

Skill or task variety is another job resource that may be present in varying levels depending on the nature of the gig work. Skill variety and task variety concern how much diversity is present with respect to skills utilized or tasks performed (Hackman & Oldham, 1975). Based on well-established motivation theories, we would expect that gig work with more skill or task variety to result in more experienced meaning and well-being (Hackman & Oldham, 1975, 1976; Humphrey, Nahrgang, & Morgeson, 2007), however, this has yet to be definitively shown in relation to gig work specifically.

Gig work has the potential for increasing skill and task variety, as workers may complete gig work in addition to a full-time job. In a sample of Mechanical Turk workers, Keith and colleagues (2019) found that worker reasons for completing work on the platform included things like “keep my mind sharp” and “sometimes learn new things doing HITs or exposed to issues I didn’t know about before.” Thus, the variety available in the gig economy may allow workers to experience growth and even meet psychological needs for competence (Deci & Ryan, 2000; Ryan & Deci, 2000). Even for those who have full-time jobs, taking on an additional job in the gig economy may be a form of job-crafting (Wrzesniewski & Dutton, 2001).

Conversely, gig work may represent a form of hyperspecialization where labor is subdivided into smaller and smaller components resulting in a lack of variety in terms of tasks or

skills (Malone, Laubacher, & Johns, 2011). This phenomenon is seen most prevalently on crowdsourcing platforms where work is divided into simple, low-skilled work allowing the work to be completed by a large number of people. The result is increased completion speeds and lower costs for the employer but may be experienced as monotonous to workers. Moreover, workers often appear to specialize in particular types of gig work unless it can be easily combined with another (e.g., Uber and Uber Eats). By specializing, workers are able to increase efficiency and maximize profits but necessarily diminish the skill variety of their work as a result (Malone et al., 2011).

In a recent examination comparing changes in job characteristics since 1975, Wegman and colleagues (2018) found that perceived autonomy and skill variety have increased among workers. This finding, however, may not hold in the gig economy. Much like autonomy, gig workers are likely to experience different levels of task and skill variety in the gig economy. Skill and task variety especially have been underexplored – and perhaps underappreciated – aspects of the gig economy.

Personal Adaptation Factors

Human Capital

Human capital theory (Becker, 1964) would suggest that individuals possessing more skill, education, knowledge, and experience have more job opportunities, growth opportunities, and economic success (Unger, Rauch, Frese, & Rosenbusch, 2011). This applies to the gig economy as human capital may provide workers with more autonomy in the form of choice. That is, gig workers with higher levels of human capital are more likely to have alternative employment opportunities outside of the gig economy making it more likely that such workers are entering the gig economy out of opportunity (i.e., pull reasons) rather than necessity (i.e.,

push reasons) (Keith et al., 2019; Stephan, 2018). Additionally, human capital is likely to be correlated with economic security. Economic security in turn buffers workers against many of the potential downsides of the gig economy, especially precarious work situations. People who are otherwise economically secure – with full-time employment elsewhere or having a significant other with another form of employment, for example – are likely to experience the more positive aspects of the gig economy (e.g., autonomy) without some of the negative aspects (e.g., precarity).

More experience within the gig economy itself may also provide economic benefits to workers. Some platforms may incentivize workers who gig full-time or with more tenure on the platform by giving workers early access to gigs or providing a higher wage (Selyukh, 2019). Experience has also been empirically shown to increase earnings on certain platforms such as Uber. Compared to drivers who have completed fewer than 100 trips on the platform, workers with 2,500 or more trips earn approximately 14% more (Cook et al., 2019). This increase in earnings is largely attributed to learning strategies associated with platform such as where to drive, when to drive, and when to cancel trips (Cook et al., 2019).

Finally, workers who possess higher levels of human capital – particularly skill – may have the ability to be more selective. This ability to select work based on one's skill and personal preference is likely to result in more experienced meaning and growth. In support of this, Spreitzer et al (2017) found two versions of the alternative work arrangements: low-skill workers struggled to make a living and were beholden to the needs of the organization, but high-skill workers benefited from the flexibility. Differences between high- and low-skilled labor experiences in the gig economy may mirror differences found in research comparing independent contract workers and temporary workers. Specifically, high-skilled gig work may be more

similar to independent contracting with gig workers acting more as micro-entrepreneurs – such workers likely experience more control and choice when selecting work. Conversely, low-skilled gig work may be more similar to the negative experiences often described by temporary workers such as low pay and lack of job security.

Social Capital

The gig economy, like many alternative work arrangements, can be isolating (Ashford et al., 2018; Tran & Sokas, 2016). Although supervisors and coworkers may be sources of stress in the workplace, they are also sources of support and relationships (Luchman & González-Morales, 2013). Workers often lack contact with other workers doing similar work and have limited (sometimes no), consistent contact with the third-party platform or the employer. Such conditions are problematic, as self-determination theory posits that all individuals universally have needs for autonomy, competence, and relatedness to foster well-being (Deci & Ryan, 2000; Ryan & Deci, 2000). Thus, social support and relationships, more generally, are important for positive functioning. As expressed previously, this lack of social relationships and the competitive nature of the gig economy may also lead to alienation unless the gig economy adapts to promote the humanization of workers.

Those with higher levels of social capital – social relationships that can garner support and resources (Adler & Kwon, 2002; Coleman, 1988) – are less likely to experience the ill effects of isolation and alienation. In the gig-economy, however, social capital may need take on different forms. For instance, one way in which workers have adapted to the isolating conditions of the gig economy is to form virtual platforms for connecting with other gig workers. Examples of this can be found with sites such as UberPeople.net, Upwork Community, and various Subreddits (e.g., Turker Nation, Uber Drivers, TaskRabbit). These online communities offer

unique opportunities for gig workers to learn from the experiences of other gig workers and garner social support from within the gig economy. Some websites have even become a means for collective bargaining. Wearedynamo.org, for example, was organized by researchers and workers on Mechanical Turk to lobby academic researchers to pay Mechanical Turk workers according to the federal minimum wage (WeAreDynamo, 2018). Specifically, the site provides form letters for contacting Jeff Bezos (Amazon CEO) and academic researchers utilizing the site as well as contact information for workers to seek support directly from the site creators. Even for gigs where workers are potentially pitted against one another, such as rideshare drivers, there is evidence of workers finding ways to collaborate and communicate online or in person to advance their mutual benefit (Zetlin, 2019).

Social capital may also come from outside the gig economy. Having a network of family and friends can provide financial and psychological resources that buffer against the precarious nature of gig work. Additionally, gig workers could seek new ways to interact with others. For example, gig workers who work primarily online may opt for coworking spaces where they can work among others for a monthly fee (Spinuzzi, 2012). Recent research on this emerging trend has found that coworking spaces offer social and intellectual support as well as networking opportunities (Gerdenitsch, Scheel, Andorfer, & Korunka, 2016; Spinuzzi, 2012; Waters-Lynch & Potts, 2016).

The gig economy certainly poses challenges to needs for relatedness, but there are many ways in which workers can adapt to seek social support from outside and within the gig economy. The emergence of virtual chat rooms, creative ways of collective bargaining, and the rise in coworking spaces suggests that workers are already finding ways to adapt to conditions in the gig economy. Research examining the various ways gig workers form social networks or

social relationships would be beneficial for understanding how these relationships impact worker performance and positive functioning.

Psychological Capital

Although many personal characteristics may buffer gig workers against the difficulties present in the gig economy, psychological capital may be particularly helpful. Psychological capital originates from the positive psychology tradition and is similar to but distinct from human capital (Becker, 1964) and social capital (Adler & Kwon, 2002). Psychological capital is specific to ‘who you are’ (Luthans, Luthans, & Luthans, 2004; Luthans & Youssef, 2004) and is made up of positive psychological characteristics such as self-efficacy, hope, optimism, and resiliency (Baron, Franklin, & Hmieleski, 2016; Luthans, Avolio, Walumbwa, & Li, 2005; Luthans et al., 2004; Luthans & Youssef, 2004). Individually these constructs have been shown buffer individuals against emotional exhaustion and adverse effects on well-being. For example, one study found that resilience moderated the impact of job insecurity on emotional exhaustion (Shoss, Jiang, & Probst, 2018). Given that job insecurity was previously identified as a potential stressor in the gig economy, resilience may be particularly important as workers continually seek out new opportunities in the gig economy. Among entrepreneurs, psychological capital has already been identified as a protective buffer against stress resulting in higher levels of well-being (Baron et al., 2016; Stephan, 2018). It is therefore possible and even likely that similar positive effects may be achieved through enhancing psychological capital in the gig economy as well.

Tolerance for Ambiguity

Another individual characteristic that may be especially relevant to the gig economy holistically is tolerance for ambiguity. Individuals with high tolerance for ambiguity are able to

perceive unfamiliar or ambiguous situations more positively – as challenging or interesting rather than stressful (Furnham & Ribchester, 1995). This is particularly important for gig workers as tolerance for ambiguity has been linked to lower levels of stress among both temporary workers and contingent workers (Bauer & Truxillo, 2000; Connelly & Gallagher, 2004).

Gig workers face an immense amount of ambiguity relative to the traditional work place. As Petriglieri and colleagues (2019) noted, in the gig economy “workers operate in weak situations (Mischel, 1973) with unclear expectations about appropriate behaviors” (p. 125). These authors also argue that a loose attachment to organizations creates precarious work identities requiring gig workers to construct identities around routines, places, people, and purpose. We argue, therefore, that tolerance for ambiguity is especially important for gig workers so that they may operate in weak situations long enough to foster such a connection to routines, places, people, and purpose. Our proposition, however, remains to be tested.

CONCLUSIONS AND PROPOSED RESEARCH AGENDA

Past research on the gig economy has suggested that experiences within the gig economy are likely to vary. Based on the diversity of gig work alone, we whole heartedly agree. Gallup (2018) suggested “a tale of two gig economies” where some workers enjoy many of the benefits of the gig economy and others many of the negative aspects. Based on our review, we suggest that such a dichotomy may be misleading. Many of the demands and resources present in the gig economy are both multidimensional and continuous. For example, workers may experience different forms of autonomy (e.g., working hours vs. payment) and to varying degrees. Thus, we recommend future research refrain from classifying gig work as positive or negative and focus instead on the factors that influence how gig work is experienced.

In line with this call, our working model highlights features of the gig economy that are likely to shape worker experiences. To begin, workers base their decision to engage in the gig economy on both push and/or pull factors. Although we believe push factors are more likely to result in negative outcomes such as lower levels of well-being, we also believe pull factors based on internal preferences, interests, and values are more likely to result in positive outcomes such as higher levels of well-being and persistence in the gig economy. It is possible (even likely) that workers enter the gig economy for multiple push and pull reasons. Thus, it may be useful to examine motivations for entering the gig economy in terms of importance.

The model also suggests that one's experience in the gig economy is likely to depend on the nature of the gig work – particularly how well the job resources balance out the demands. On one hand, the gig economy lends itself to many job demands such as job insecurity, precarity, alienation, underemployment, and emotional labor that may act as stressors. On the other hand, gig workers may receive job resources in the form of autonomy and task/skill variety. The degree of autonomy and task/skill variety will minimize the potential for precarity, alienation, and underemployment in particular. Additionally, one's experience within the gig economy is likely to depend on person-environment fit (Edwards, 1996; Edwards, Caplan, & Harrison, 1998). We argue that workers with higher levels of human capital, social capital, psychological capital, and tolerance for ambiguity are better suited and more likely to thrive in the gig economy.

Finally, experiences in the gig economy influenced by the relative job demands and job resources will influence worker well-being, as well as, how likely a worker is to continue working in the gig economy. Workers who experience high levels of job insecurity, precarity, alienation, underemployment, and emotional labor are assuredly going to experience lower levels of well-being and may decide to leave the gig economy unless their economic situation prevents

them from doing so. Conversely, workers who experience higher levels of autonomy and task/skill variety or those who possess or develop more human capital, social capital, psychological capital, and tolerance for ambiguity are more likely to flourish in the gig economy even when the job demands outlined previously are still present.

The model presented and the literature reviewed should be perceived as a starting point and is not intended to be comprehensive. Rather, our review serves to feature what we currently know and do not know from past research on the gig economy and other similar work arrangements. There are many other potential environmental characteristics, job characteristics, and personal characteristics not considered in the current model. Moreover, new platforms and forms of gig work are constantly emerging, making it difficult, if not impossible, to identify all the relevant characteristics that influence the health and well-being of gig workers. Thus, in addition to our call for future research on relevant environmental and individual work characteristics in the gig economy, we highlight a number of other unanswered questions to spur additional research on the gig economy and its workers.

Who enters the gig economy?

The demographic makeup of the gig economy to date is currently unknown. Between the high turnover rates in the gig economy and past research conflating gig workers with other types of contingent workers, it is difficult to extract a clear picture of who takes part in the gig economy. More importantly, we have little understanding of how demographic and other characteristics relate to push and pull motivations, as well as the type of gig work entered into. As emphasized throughout this chapter, the nature of the gig work will have immense repercussions for worker well-being, but the manner and degree to which that is the case is still subject to debate and exploration.

What is the life cycle of the gig economy?

As mentioned previously, turnover rates on ride-sharing platforms are as high as 500% per year (Mims, 2019). In the broader gig economy, JPMorgan Chase Institute found that the gig workers surveyed were only active on the platforms for three months or less out of the year (Farrell & Greig, 2016). Such statistics leave many unanswered questions regarding why workers leave, whether they intend to return to the gig economy, whether they have simply moved to another gig platform, and whether participation in the gig economy is cyclical. We suggest that Schneider's (1987) Attraction-Selection-Attrition framework may offer some insight. For instance, workers with more psychological capital and tolerance for ambiguity may be more attracted to and self-select into the gig economy. Such individuals are also more likely to reap the benefits of the gig economy, while others who do not fare well in the gig economy will eventually self-select out.

What are the long-term effects of working in the gig economy?

Currently, the gig economy is still in its infancy and it is unclear what types of long-term impacts will emerge. As such, the role of time in the gig economy should be examined as a variable when predicting well-being. From a practical standpoint, it is currently unclear what constitutes a long period of time in the gig economy. We also suspect that additional control variables may need to be considered when examining the relation between time and worker well-being such as whether workers participated in the gig economy continuously or intermittently.

We suspect that researchers may find different relational patterns between time and gig worker well-being and that the pattern may depend on the nature of the gig work and the characteristics of the gig worker. Specifically, it is possible that there is a positive relationship between time spent in the gig economy and well-being – people who spend more time in the gig

economy may learn various strategies, form identities and social relationships, and adapt by developing more social, human, and psychological capital in the process. It is also possible that there is a negative relationship between time spent in the gig economy and worker well-being as the demands of working in the gig economy may have a more negative impact as time goes on. It is even possible that researchers may find a curvilinear effect or a weaker relationship between gig work and well-being over time. We also suggest that these relationships may be influenced by whether workers enter or remain in the gig economy for internal reasons (e.g., enjoyment) or external reasons (e.g., economic necessity). For example, workers who spend longer periods of time in the gig economy out of economic necessity are likely to experience more negative side effects.

How do gig workers craft work lives?

Gig work is in some ways unique, as workers frequently have other jobs – whether part-time, full-time, or other gigs. Such flexibility allows for what Keith et al. (2019) termed “gig-crafting.” Gig crafting may be viewed as a specific type of job crafting (Wrzesniewski & Dutton, 2001) whereby workers take on one or more jobs to increase variety, promote growth, or seek meaning. We suggest that when workers pursue gigs based on interest, preference, or values, this may be a form of job crafting and have a number of positive outcomes for worker health and well-being. More research, however, is necessary to understand how individuals pursue gigs as a way of crafting their work lives and what impact this has on well-being outcomes.

How do workers form a work identity in the gig economy?

Related to the question above, we currently do not know whether or how workers in the gig economy generate work identities. One’s work identity often stems from an attachment to an organization or set of roles within the organization and such identities provide an important

source of belonging, legitimacy, and dignity among other things (Ashforth & Schinoff, 2016; Petriglieri et al., 2019). Identities are also shaped by coworkers and leaders who model norms within the organization (Ashforth & Schinoff, 2016). Unlike traditional workers, however, a gig worker often works apart from organizations and others posing challenges to developing or maintaining a work identity.

In one attempt to understand the phenomenon of forming a work identity outside organizational boundaries, Petriglieri and colleagues (2019) conducted semi-structured interviews with sixty-five independent workers (e.g., artists, writers, consultants, executive coaches, IT workers). These authors found that the independent workers formed connections to routines, places, people, and purposes to manage emotional tensions created by a lack of an organizational environment and create viable work identities. Notably, Petriglieri and colleagues focused on independent workers who had high degrees of autonomy and whose work required some level of knowledge and creativity. Thus, their findings may not translate to gig workers completing low-skilled work. It is also worth noting that the independent workers studied were “firmly outside” the organization. In contrast, gig workers may have jobs in traditional organizations in addition to a job in the gig economy. In such cases it is unclear whether such workers incorporate gig work into their work identity.

Despite potential differences, there are a number of insights provided by Petriglieri and colleagues that may serve as a foundation for similar research in the gig economy. First, almost all of the independent workers surveyed by Petriglieri and colleagues reported that organizations could be stifling; however, the economic uncertainty and instability outside organizations often created emotional tensions. Such tensions are likely to be found in the gig economy holistically as workers balance flexibility and precarity. Second, workers faced with high degrees of

autonomy used connections to routines, spaces, people, and purpose to provide structure. Adding structure to one's work helps create a sense of security in the face of precarity. Gig workers may also need to impose structure (even artificially) as antidote to high levels of autonomy. One example of this is having a set working schedule for completing gig work as a means of having a routine and perhaps even making the gig feel more like a job (Keith et al., 2019). Finally, workers who fail to create connections to routines, places, people, and purposes are less likely to manage the emotional tensions that arise from precarity (Petriglieri et al., 2019). In the gig economy, workers who join chat rooms, attend gig worker conferences, have designated schedules or work spaces, and construct meaning, may likewise experience these connections as a buffer against precarity.

Will platforms and organizations invest resources to retain workers and increase well-being?

As the gig economy grows, there is likely to be increasing pressure on gig platforms to treat workers fairly. Platforms may also be incentivized to retain on-demand high performing or skilled gig workers who may be in high demand. Research in the organizational sciences is well poised to help gig platforms find interventions designed to improve worker health and well-being while also increasing retention.

The first step may be to understand what gig workers need to feel more secure in the gig economy. For example, one underappreciated challenge of working full-time or long-term in the gig economy is the current lack of benefits in place – particularly health insurance and retirement (Petrovich, 2018). Indeed, recent research reported that human resources currently underestimates the importance of benefits for attracting and perhaps even retaining external workers such as gig workers (Nye & Hill, 2019). There are currently some initiatives in California, New York, and Washington state that are looking for ways to govern minimum wage

benefits (Conger & Scheiber, 2019; Eisenberg, 2019); however, for reasons outlined in a previous section (see Precarious Work Situations), providing traditional employment benefits to workers in the gig economy certainly poses legal and human resource challenges. Innovation may be needed to find benefits or adaptations of benefits that are compatible with gig work such as Covered 1099 – an initiative to help gig workers save for and file taxes in the United States (Eisenberg, 2019).

One further consideration is who is likely to benefit from these interventions. In the absence of legislation or social pressure, we suspect that third-party platforms and organizations are more likely to invest in ways to retain and support gig workers if such workers are highly skilled. Highly skilled gig workers are often able to be more selective while also being in high demand. Thus, the result is likely to be an increasingly chasmic divide between high- and low-skilled workers in the gig economy. Accordingly, interventions should be considered for low-skilled gig workers in addition to high-skilled gig workers with the goal of decreasing the current divide.

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WORKER HEALTH AND WELL-BEING IN THE GIG ECONOMY

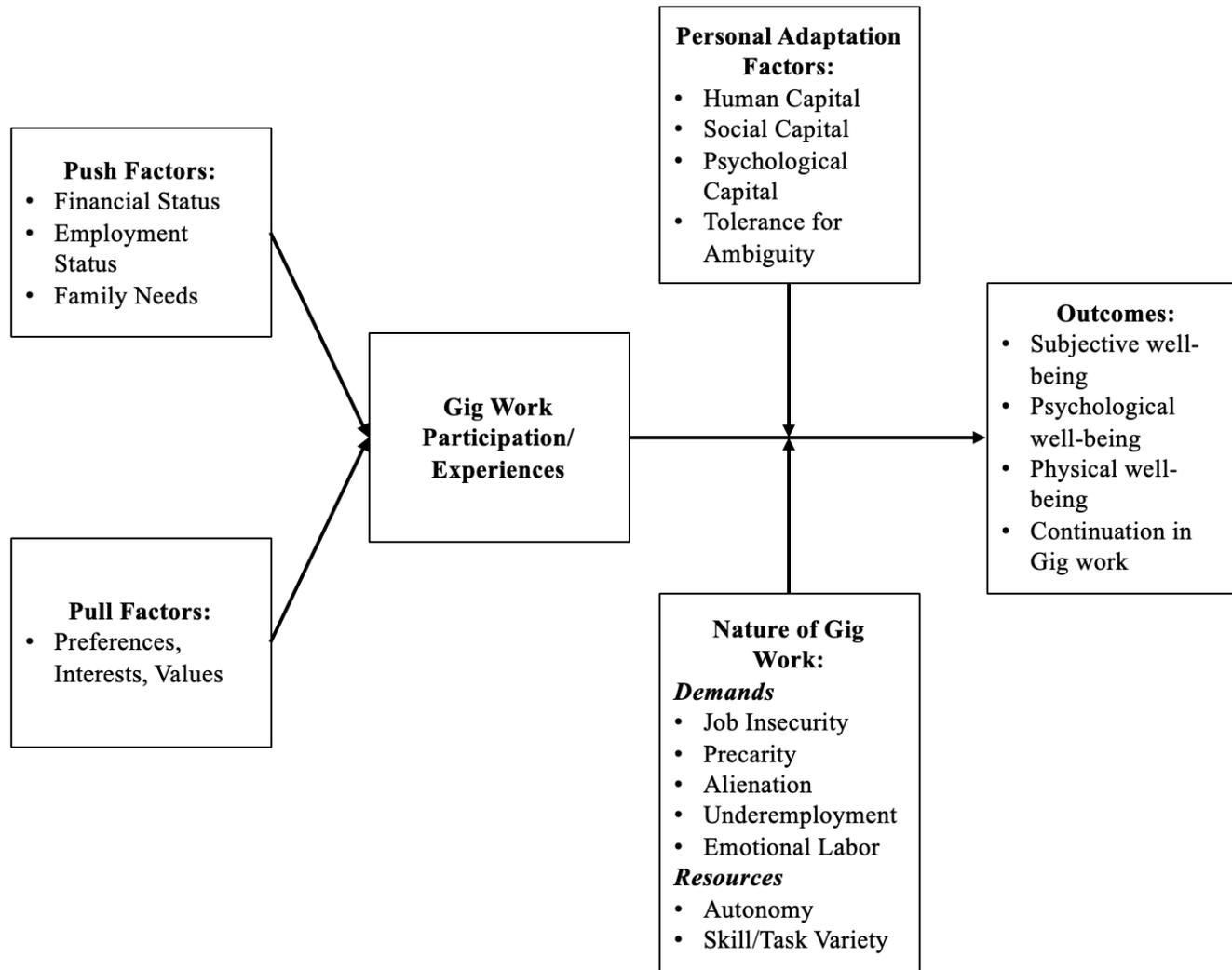


Figure 1. Working Model of Worker Well-being in the Gig Economy