

Considerations for Vocational Assessments in the Era of COVID-19

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The year 2020 was unprecedented for many reasons. Few events during the past century have been more novel and far-reaching than the emergence and rapid spread of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), the virus that causes Coronavirus Disease 2019 (COVID-19). This pandemic has resulted in significant changes in the ways we socialize, work, and communicate. It has also created economic strain in many sectors and, by extension, reshaped and reconfigured the workplace. Many employers have drastically altered their operations; some have been forced out of business. With mass COVID-19 vaccinations underway, there remain many questions about the long-term implications of the global pandemic. The authors examined data from the pandemic of 1918, the impacts of economic recessions, and contemporary data on the impact of the COVID-19 pandemic in an attempt to extrapolate implications for future vocational analyses.

Keywords: COVID-19, labor market, economic damage, vocational expert, vocational opinion, pandemic

Historians will memorialize 2020 by its many benchmark events, the most prominent and far-reaching being the outbreak of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), the virus that causes Coronavirus Disease 2019 (COVID-19). *The American Journal of Managed Care* (2020) provided the following timeline for the emergence of the COVID-19 pandemic:

- December 31, 2019, outbreak of the SARS novel coronavirus was first reported in Wuhan, China.
- January 9, 2020, the World Health Organization (WHO) formally announced a coronavirus-related pneumonia in Wuhan, China.
- January 20, 2020, three major U.S. airports began screening passengers for coronavirus after cases emerged in Thailand and Japan. Less than two weeks later, a Washington state resident became the first confirmed case in the U.S.
- January 31, 2020, the WHO issued a global health emergency as human-to-human transmission quickly spread to major metropolitan cities in the U.S., Europe, and Asia.
- February 3, 2020, the U.S. declared a public health emergency.
- March 11, 2020, the WHO declared COVID-19 a global pandemic.
- March 13, 2020, COVID-19 was declared a national emergency in the U.S.

There are many types of human coronaviruses, including some that cause mild upper-respiratory tract illnesses (Centers for Disease Control and Prevention [CDC], 2020). SARS-CoV-2 virus is not the same as the coronaviruses that cause the common cold. SARS-CoV-2 can lead to COVID-19, 'CO'

denoting 'corona,' 'V' represents 'virus,' and 'D' disease. This is a new disease not previously found in humans (WHO, 2020).

Looking to the Past to Prepare for the Future

The COVID-19 pandemic, although contemporary and significant in its reach, is not the first of its kind. As documented by the CDC (2018), COVID-19 has joined the ranks of recent past pandemics such as the 1957-1958 H2N2 virus pandemic, the 1968 H3N2 virus pandemic, and the 2009 H1N1 pandemic. However, the COVID-19 pandemic has been most often compared to the 1918 influenza pandemic, commonly referred to as the "Spanish Flu," in terms of both scope and scale. The 1918 virus underwent several mutations, the first wave beginning in March of 1918, followed by three deadly waves through the spring of 1920 (CDC, 2018).

Although it has been over 100 years since the 1918 pandemic occurred, it is the most recent from which to derive comparisons as to the effect COVID-19 may have on our modern U.S. economy and labor market. Similar to the COVID-19 pandemic, the 1918 pandemic spread with remarkable speed in less than six-months, and in two subsequent waves through 1919 (Patterson & Pyle, 1991), and a third wave in 1920 (CDC, 2018). The first wave arrived in the U.S. in the spring of 1918, and the second arrived in the fall and winter of that same year. The third wave of trailing outbreaks was observed in 1919. Patterson and Pyle (1991) noted an enormous death toll, with estimates of up to 30 million deaths worldwide during this period, "more than three times the number of military casualties suffered by all of the belligerents during more than four years of fighting in what was then called the Great War [World War I]" (p.21). At the time of the writing of this paper, there were 31,672,240 confirmed cases and 567,233 deaths related to COVID-19 in the U.S., with 3,022,288 deaths worldwide (Johns Hopkins Coronavirus Resource Center, 2021).

The actual impact of the 1918 pandemic on the U.S. economy is difficult to assess. This is due to the intensity and scale of World War I overlapping with the pandemic's timeline (1914-1918), and the limited economic data available from that time period, mostly preserved through print media and Federal Reserve District data (Garrett, 2007). Notably, Velde (2020) described the impact of the 1918 pandemic on the economy as "just one of many headwinds in an eventful year" (p.15).

However, Garrett (2007) described how available data pointed to the significant economic effects of COVID-19 pandemic which indicated that many businesses, especially those in the service and entertainment industries, suffered significant losses in revenue. In contrast, other businesses that specialized in health care products experienced increases in revenue. Comparatively, COVID-19 pandemic shelter-in-place policies have most adversely impacted the service and entertainment industries throughout the U.S. (Garrett, 2007).

Velde (2020) showed that, "Manufacturing employment in New York state and Massachusetts rebound(ed) quickly from the 1918 epidemic" (p.15). Rockoff (2004), described a 44-month economic expansion from 1914 to 1918, and attributed this to the rise of government spending upon entry of the U.S. into World War I, which resulted in an unemployment decline from 7.9 percent in 1914 to 1.4 percent in 1918. An additional variable Rockoff (2004) considered was significant control of the economy by the government during wartime, which included increased federal centralized pricing, production controls, and rationing of supplies and materials.

It has become increasingly evident that the effects of COVID-19 are even more far-reaching than what we have seen in past pandemics. As such, there is a vastly different landscape between the 1918 and 2020 U.S. economies. Velde (2020) described the 1914 labor market as a "population [that] was roughly evenly split between rural and urban, whereas the ratio is 5 to 1 now," (p. 32) in favor of urban living. Perhaps more significant was that in 1914, "Agriculture accounted for 33% of employment, and manufacturing another 28%." While in 2020, employment in these two sectors were at 2% and 8% respectively (Velde, 2020, p. 32).

If the many headwinds described by Velde (2020) during World War I were not enough to complicate the empirical data surrounding the impact of the 1918 pandemic, efforts to compare 2020 pandemic

data are further convoluted by the economic landscape of the subsequent “Forgotten Depression” of 1920-1921 (Grant, 2014). It has been difficult to attribute to or divest from, the impact of the 1918 pandemic from the economic depression of 1920-1921 with such little data. The lack of reliable sources from the early 1900’s has also made it difficult to objectively predict what may happen in a post-2020 pandemic economy.

Grant (2014) noted that by 1919, a predicted post-war recession had not yet occurred. In fact, business was booming, largely driven by the cancellation of huge amounts of war-time debts after the Armistice and further aided by a sudden spike in American consumerism, which was previously depressed by a combination of the 1918 pandemic and war-time economics. However, by early the 1920’s, the combined effects of a mass influx of returning troops attempting to reintegrate into the labor market and extreme deflation caused the economic boom to wane, as employment rates rose to between two and six million and lasted well into 1921 (Grant, 2014).

It has been made clear that the effect of the 1918 pandemic contributed, at least in part, to the subsequent economic turbulence of the early 1920’s. Again, the true extent of the current pandemic’s impact on the economy remains difficult to assess with such limited comparable data. Barro et al. (2020) have postulated that data on mortality and economic contraction during the period of 1918 to 1920 are plausible in terms of their predictive value to the anticipated economic rebound from COVID-19. What remains to be seen is how or if other confounding variables such as political divide, social discord, and technological advances, along with a myriad of other significant global events, will impact the U.S. economy and labor market in the aftermath of the 2020 pandemic.

In parsing these issues out of time, Grant (2014) cited an apt adage that “the past is a foreign country” (p. 5). We have tasked ourselves with looking back into the past for future insights about the impacts of COVID-19. We have found that predicting future economic changes related to the COVID-19 pandemic has been difficult given the unique circumstances of the modern era and lack of comparative data from the 1918 pandemic. The challenges of 100 years ago are not the same today. There is no “Great War” and the federal government has not actively imposed control over industries and production for wartime efforts. Our recent economic landscape has been drastically different due to the evolution of the labor market subsequent to the proliferation of personal computers and information technology. This has allowed many sectors of the economy to continue to work largely uninterrupted through the COVID-19 pandemic, while others have succumbed to the effects of pandemic precautions.

The Effect of the Pandemic on our Day-to-Day Lives

Kramer and Kramer (2020) noted that occupational and socioeconomic statuses were interrelated. Occupations may often be perceived as “more important work” and “less important work,” and the COVID-19 pandemic has further stratified how occupations are socially valued. For example, the “essential” or “non-essential” nomenclature has designated the social value of occupations, a new taxonomy that may persist. Kalleberg (2011) published widely on the topic of what was then described as “good” and “bad” jobs. Bad jobs as defined by Kalleberg (2011) were those with low pay, lack of benefits or access to healthcare. Kalleberg (2011) further defined non-traditional jobs, such as temporary work, as falling into the category of bad jobs.

Kramer and Kramer (2020) suggested that the divide between good and bad jobs will become even wider due to the aftereffects of COVID-19. The relationship between the impact of COVID-19 on the health of individuals and the economy has remained central to the discussion of long-term effects related to the pandemic. Most of the debate has focused on how to mitigate the immediate labor market effects, school and business closures, individual unemployment, and fluctuating COVID-19 case rates. Rojas et al. (2020), suggested a continuum between healthy populations and economic well-being, specifically related to how policies mitigating and controlling the spread of COVID-19 have impacted the economy. This was not a new discussion, as Preston (1975), Cutler et al. (2006) and Ruhm (2000) have each explored the continuum between a healthy population and economic well-being, although not in the context of a pandemic.

Pinsker (2020) highlighted two different observed employment-related experiences during the COVID-19 pandemic. There were some individuals who were able to work remotely, but who experienced high levels of stress related to childcare, fear of leaving home and other associated concerns. The second phenomenon included individuals who were unable to work remotely, which placed them at increased risk for exposure to contracting the virus and at higher risk for layoffs and negative financial impacts due to the pandemic. Although both groups were affected, Pinsker (2020) suggested the COVID-19 pandemic has increased the socioeconomic divide in the labor market. Specifically, Pinsker (2020) and Kramer and Kramer (2020) agreed that people considered at risk for unemployment, underemployment, adverse physical and mental health conditions and other family difficulties were at risk for exacerbation of these problems both during and after the pandemic.

Guan et al. (2020) addressed stressors related to the pandemic, such as working remotely, lack of available work, job insecurity, and their impact on one's mental health. Guan et al. (2020) further explored that "essential workers" had worked long hours in potentially dangerous situations that may have impacted their mental well-being.

Further, women have been negatively impacted by the COVID-19 pandemic, particularly women of color, who were more likely to have been laid off or furloughed during the pandemic (Coury et al., 2020). Pre-pandemic stalling of career growth jeopardizing financial security has been predicted to intensify the challenges faced by underemployed women and those already considered at-risk for financial insecurity (Coury et al., 2020; Blustein et al., 2020).

The reconfiguration of the labor market due to the effects of COVID-19 has gone beyond impacting employment. Some employers have curtailed benefits such as health care coverage, which in turn, has increased the numbers of uninsured individuals and families. According to Gangopadhyaya et al. (2020), more than 3 million individuals lost employer-sponsored health insurance coverage, and an additional 2 million became uninsured by the summer of 2020.

Nearly half of those who lost health insurance benefits identified as being of Hispanic/Latino descent (1.6 million). The data from spring to summer 2020 suggested that those who identified as being of Hispanic/Latino descent were disproportionately impacted by the pandemic-related recession, more than any other ethnicity (Gangopadhyaya et al., 2020). The loss of job-based insurance has resulted in an increase in reliance on public insurance coverage (Gangopadhyaya et al., 2020). An analysis from Avalere Health predicted that up to 12 million people were to lose job-based health insurance by the end of 2020, disproportionately affecting workers who identified as Black and of Hispanic/Latino descent (Sloan et al., 2020).

Although caution should be taken in reviewing job numbers as the COVID-19 situation is fluid and long-term impacts remain unknown, there were interesting features to note from the data presented by Wolf (2020). As of December 2020, occupational fields traditionally regarded as strong, such as those in health care, had seen a reduction of 527,000 workers compared to February 2020; while increases in employment for professional and business services, and transportation and manufacturing were appreciated over this same time period. However, many occupational groups have experienced losses, with industries such as government, retail, leisure, and hospitality realizing the greatest shortfalls in 2020. Wolf (2020) noted that industries in decline as of December 2020 included food service, transportation, arts and entertainment, and real estate.

As technology promotes an ability to work remotely, Vogels et al. (2020) found that 53 percent of Americans believed internet access had been essential during the COVID-19 pandemic, while 34 percent viewed it as important but not essential. Challenges related to internet accessibility have been noted, along with concerns over increased cost to acquire these services, incurred by families to work and attend school from home (Vogels et al., 2020).

Research has confirmed that workers with disabilities are often the last to get hired and first to get fired (Lengnick-Hall et al., 2001). The labor market in the era of COVID-19 has posed no exception. Data from the start of the pandemic has suggested that unemployment rates rose from 4.4% in March 2020 to 14.7% in April of 2020 for the general population, but much more so for persons with disabili-

ties (Bureau of Labor Statistics [BLS], 2020b). Maroto and Pettinicchio (2020) noted an increase of unemployment for persons with disabilities at a rate of 17%.

Data has suggested that vulnerable workers holding unskilled to semi-skilled jobs prior to the pandemic were more unlikely to see their jobs return (U.S. Private Sector Job Quality Index, 2020). One estimate projected 42 percent of all jobs lost will not return, while the same study suggested work re-allocation will ameliorate some, but not all, restructuring of the labor market (Hite & McDonald, 2020). Brooks (2020) indicated the COVID-19 pandemic would increase economic and labor market inequality among those with disabilities.

Occupations That Have Benefitted

Long-term job demand for occupations in certain sectors has been likely to occur (Kramer & Kramer, 2020). Data from the BLS has projected that from 2019 to 2029 the number of jobs in the fields of information technology and medical research sectors will increase. Projections prior to COVID-19 noted that six of the ten fastest growing professions were in health care, including nurse practitioners, home health aides, physical therapists, health care managers and physician assistants (Wolf, 2020). Data utilized at the time of this publication is from the Employment Situation Summary from November 2020 (BLS, December 4, 2020). In keeping with what we might expect, health care added 46,000 jobs in November, 2020 alone with gains occurring in offices of physicians (+21,000), home health care services (+13,000), and offices of other health practitioners (+8,000) have shown trends for higher levels of employment in this sector, despite an overall decrease between February 2020 to December 2020 (Wolf, 2020).

The Duration of the COVID-19 Related Downturn is Impossible to Predict

Baker et al. (2020) projected a return to pre-pandemic market trends beginning by 2022 at the earliest. Christakis (2020) prognosticated that the economic impact of the pandemic will reach beyond 2024, potentially transforming economic compensation, benefits, and supply chains. The Economist (May 2, 2020) outlined its most positive scenario as indicating labor markets taking half a decade to return to pre-pandemic rates, with a full recovery taking up to two decades.

Dunford and Qi (2020) and "en (2020) postulated that the COVID-19 pandemic has been an opportunity that has naturally accelerated entrenched trends towards a geopolitical reset which will see the restructuring of the global economic focus away from traditional markets toward a multi-polar global economic structure based on technology and other modern innovations.

According to the BLS (2020a), concerns of subsequent waves of COVID-19 may see intensified economic recession that may result in hikes in consumer prices and job loss. Public health mandates, such as social distancing and limiting gathering capacities, have had a deflationary effect on the demand for goods related to socialization and close contact, which has contributed to increased unemployment and the restructuring of employer spending in industries such as restaurants and entertainment to mitigate new policies (BLS, 2020a).

The impact of lost and/or decayed skills for individuals who have experienced separation from the labor market has also been of considerable concern. Economists have further questioned the effects that social distancing, working remotely, and shopping online have had on city centers and commercial properties, which may reshape labor market sectors that support these services (BLS, 2020a), particularly for the real estate industry. Much like the BLS (2020a), Bloom (2020) suggested employers may opt to leave city centers for more industrial areas and suburbs, which may adversely affect the need for mass transit.

Bloom (2020) pointed out that, along with what many expect to be temporary repercussions from the COVID-19 pandemic, there are likely to be longstanding effects on the workplace as employers improvise and reconsider how they do business. With other pandemics events such as SARS, MERS, and Ebola considered to be "near misses" in terms of their global impact, and in preparation for future

COVID-19 outbreaks and other pandemics, working remotely may continue to be a common feature for years to come. It is fair to postulate that the economy would suffer even greater losses without the ability for many to work remotely.

These issues, along with many others, have had significant implications for post-COVID-19 assessments of earning capacity and economic damage calculations.

Consideration of the Effects of the COVID-19 Pandemic on Vocational Assessments

There has been a predictive value in knowing how labor markets have tended to respond to economic recessions and how COVID-19 may impact the U.S. labor market. Available data related to the study of past recessions has had direct application to vocational assessment, rehabilitation plans, and the COVID-19-induced recession.

It has been anticipated that those who continue to be employed during a recession, or pandemic-induced recession, will likely see minimal to no change in their earning capacity over time. Oreopoulos et al. (2012) explored the effects of recessions on the labor market, finding that unemployed workers, those who have not yet entered the labor force (i.e., recent graduates), workers displaced due to injury, individuals with disabilities, or those who have lost their jobs because of a recession, are more susceptible to having their average earnings depressed as a consequence and, thus, will have diminished earning capacity over time. For example, long-term earnings decline has been predicted for students who graduate from college during a recession economy. Oreopoulos et al. (2012) noted that some graduates experienced a persistent earnings decline that lasted for a decade or more. These individuals often entered the workforce in lower-paying jobs and gradually assumed positions which allowed them to earn wages more in line with their earning capacity had they begun working in a non-recession economy. Graduates with degrees from highly coveted institutions suffered less and moved toward more advantageous employment opportunities more quickly. Conversely, wages of graduates from less prestigious institutions were permanently affected due to the nature of labor market conditions during a recession (Oreopoulos et al., 2012). Graduates from less prestigious institutions realized lower earnings capacity, and faced four to five times the cost of economic recession than did the graduates from more elite institutions (Oreopoulos et al., 2008). This analysis of the impact of an economic recession on future wages was consistent with hypotheses that COVID-19 may have increased disparagements between those with higher educations and commensurate occupations that allowed them to work remotely, and those who were at risk for unemployment and underemployment prior to the pandemic (Pinsker, 2020). The latter of the two was expected to be at increased risk for negative employment outcomes secondary to the COVID-19 era economy (Pinsker, 2020). An example of this would be the difference between how service and entertainment-related industries have experienced job loss versus how technology, finance, and other similar professions have thrived during the initial phases of the pandemic (BLS, 2020a; Wolf, 2020).

Securing jobs offering opportunities for advancement has been more difficult during an economic recession, especially for workers with fewer skills and fewer opportunities for career mobility and growth (Topel & Ward, 1992). Again, these difficulties were expected without the added complexities of finding work during a pandemic. The long-term effects of graduating during an economic recession may have depended on how recessions affected the quality and availability of initial job opportunities, wage adjustments, productivity by employers, and human capital accumulation. Historically, the quality and availability of jobs has usually declined during economic recessions (Reder, 1955).

Further, when assessing access to employment and earning capacity, consideration of the length of time an individual would have the capacity to earn and the state of the current and future labor market has been central to an earning capacity analysis. As outlined above, the predictive nature of these analyses has been complicated by, among other factors, the lack of retrospective data available to predict the long-term implications of the impact of COVID-19. In addition to assessing an individual's ability to perform work activities when considering the effects of the COVID-19 pandemic, their abil-

ity to perform work activities, reduced access to the labor market, and potentially decreased earning capacity related to short-term erosion of available opportunities, must also be considered. This has been especially true for low-earning marginal workers who have lost access to segments of the labor market due to an acquired disability. This has also been true based upon human factor analyses and/or automation of jobs pre-pandemic, and will likely be accelerated because of the pandemic and resulting economic recession.

Additional Labor Market Considerations Related to Employment and Earning Capacity

- Shopping remotely.
- Impact upon retail jobs.
- Government decisions to limit travel and the implications for travel/tourism and restaurant jobs (e.g., amusement parks temporarily closed, cruise ship vacations have been cancelled, restaurants have closed and, therefore, staff have lost their jobs).
- Training program re-design: In-person occupational training has moved to online-based programs (e.g. nursing programs that have moved to online even for patient practicals).
- Increased use of video conferencing (e.g., Zoom Video Communications, Microsoft Teams, and other applications designed for remote corporate meetings that have become incredibly popular across industries).
- Work-Life Balance: The COVID-19 pandemic has changed the boundaries of routine work behaviors. It has caused many workers to work remotely, often from home.
- Flexible Work Arrangements: Standard workers with flexible locations have usually worked full-time with a set schedule, but typically have worked from home. This may have led to an increase in work hours because of distractions and interruptions from family obligations.

Additionally, the COVID-19 pandemic has the potential to affect the following work-related factors:

- Working conditions
- Work motivations and behavior
- Job and career attitudes
- Career development
- Personal health
- Well-being

There are few certainties in our post-COVID future; however, change is inevitable. The COVID-19 pandemic has appeared to be a catalyst for economic change and the evolution of the labor market, world of work, employment, and global business practices. Early adaptations for returning to worksites have already revealed changes in brick-and-mortar businesses as well as jobs in the service and manufacturing sectors. Workplaces have revamped interiors to accommodate social distancing and sanitation, even when working with the public has not been an essential function of the job (Hite & McDonald, 2020).

Length of Job Search and Placeability

Oreopoulos et al. (2008) reported that job search theory has predicted that a temporary decline of the wage offering distribution during an economic recession has resulted in a lengthy search for locating higher paying jobs. The cost of job searches has increased with age, and higher skilled workers have been more likely to relocate or change industries. Lower skilled workers may not have had the knowledge or resources to search as diligently and may have received fewer new job opportunities after ac-

cepting lower quality jobs during an economic recession. If they had learned employer-specific skills on the job, they may also have had more difficulty changing jobs the longer they stayed with their initial employer (Oreopoulos et al., 2008).

Gibbons and Waldman's (2006) model tied career progression to human capital accumulation at either the company or industry level. These same authors also suggested that students who graduated during an economic recession had a prolonged period of job and industry mobility, and usually had less time accumulating company- or industry-specific job skills. Gibbons and Waldman (2006) also suggested that human capital accumulation may explain the faster rates of recovery experienced within companies after economic recessions, as low earning workers generally caught up with their higher-paid peers. If recessions have been related to the lower supply of jobs that have led to a career track, or of jobs that offered opportunities for skill accumulation, this has explained the permanent effects that have resulted from temporary labor market conditions (Gibbons & Waldman, 2006). For example, if a new graduate was unable to find a job in their field of study, resulting in delayed entry to the occupation, this has resulted in diminished earning capacity that potentially spanned the life of the individual's career. As the state of regional labor markets has continued to influence earnings of more experienced workers, the estimate of the effect of the first unemployment rate exposure has resulted in the long-term effects of the first unemployment rate plus the weighted sum of the effect of unemployment rates a worker faced during the life of one's career (Blanchflower & Oswald, 1994).

The effects gig workers have had on unemployment and underemployment has also been an important consideration given the boom in these jobs due to COVID-19. Ashford et al. (2018) defined gig work as a type of temporary contract work connecting self-employed workers directly with clients by a digital platform. Gig workers have been classified into the category of crowd workers, who completed and delivered location independent tasks online, who were location independent, performed on-demand work, and who completed and delivered tasks offline. The level of skills needed to deliver the tasks has been either high (e.g., architects, software engineers), or low (e.g., drivers, deliverers). Because of contracting speed and flexibility to react to labor market demands, gig workers also have experienced change from the COVID-19 pandemic. The benefits of gig work have included greater autonomy and a high potential for work-nonwork integration, which has resulted in less restrictive, individualized, and whole careers based on the gig work model. Gig work has been associated with increased risks for workers, including demanding and precarious working conditions that have included low or sporadic pay, lack of welfare coverage, social isolation, overwork, fewer development opportunities, and job and career insecurity, which has resulted in more fragmented and bounded careers (Ashford et al., 2018). The downsides to the gig economy are likely to continue to be exacerbated by the effects of the COVID-19 pandemic as this sector grows.

Disruption in Career Trajectories

For younger or early-career adults, the COVID-19 pandemic may have been their first encounter with a significant global crisis, and this may have long-term psychological and financial effects. Mid-career workers generally have been more established, but if they lost their jobs, finding a new position may have taken longer. For late-career workers and retirees, the pandemic may have been even more stressful considering the rates of death among the elderly and the residual economic effects upon pensions and investments. It has been arguable that all workers, regardless of industry or time on the job, experienced some sort of "career shock" as a result of the COVID-19 pandemic.

A career shock has been defined as "a disruptive and extraordinary event that is, at least to some degree, caused by factors outside the focal individual's control, and that triggers a deliberate thought process concerning one's career" (Ackkermans et al., 2020, p. 428). It comprises an event and a process of sense-making. Career shocks may have different attributes to determine the impact on careers, such as frequency, controllability, intensity, valence, and duration. For example, in terms of valence, the pandemic has been generally viewed as negative because of issues such as job insecurity, loss of income, the emotional impact of social distancing, and increased general anxiety. However, there may also have been positive consequences, such as spending more time with immediate family and no

longer having to commute to work. Also, while most businesses have been negatively impacted, others, for example, software companies and home gym makers, have grown at an accelerated rate.

Chen et al. (2020) posited that career shocks related to COVID-19 have had mostly negative career and psychological consequences in the short-term, e.g., job loss, reduced salary, and lower career and job satisfaction, but over time workers may move into more satisfying careers or job roles based upon their own proactive behaviors. While social distancing measures may have mitigated the spread of COVID-19, the mental health consequences have likely been a substantial increase in rates of anxiety and depression as well as an exacerbation of pre-existing mental health vulnerability and/or treatment needs (Galea et al., 2020). This is an area where rehabilitation professionals can offer guidance to clients and evaluatees to optimize their placement in the post-pandemic world of work.

Potential Impact Upon Persons with Disabilities/Employer Accommodations

Although the COVID-19 vaccines were rapidly developed and approved for emergency implementation (Graham, 2020; Paltiel et al., 2020), there has been concern about how access to it may impact the ability of persons with disabilities to remain in or re-enter the workforce. Due to age, health conditions or other factors, some populations have been recommended to wait before receiving vaccines or have been recommended against taking them altogether (CDC, 2020). Persons with disabilities, who may be immunocompromised to the point that they cannot safely tolerate a vaccine, may be unable to receive the vaccine altogether. If proof of vaccination becomes a pre-employment requirement, as has been discussed for travel, gatherings, and by some employers, this may further marginalize vulnerable individuals within this population.

On the other hand, it is also possible that a shift to remote work has been advantageous, at least to some degree, for persons with disabilities. Symptoms of fatigue and pain may become less of a barrier with goal-oriented tasks and flexible work hours available in remote work settings. Furthermore, functional limitations, such as difficulty with ambulation or mental health diagnoses (e.g., agoraphobia with resulting social limitations), may be accommodated by remote working trends; individuals may experience less push back from employers when requesting assistive technology or accommodations in the workplace. Employers have become more open to remote work opportunities, and the labor market is becoming more hospitable to these types of offerings, making room for the possibility that they may continue in perpetuity and may indeed become more plentiful as the labor market evolves.

Takeaways and Future Considerations

After considering the data available, and comparing this with what we have learned from past pandemics and economic recessions, some recommended takeaways for the reader are summarized here.

The first wave of the 1918 Pandemic began in March of 1918 and was followed by three subsequent deadly waves extending through spring 1920. The 1918 flu remained deadly for nearly a decade with only rudimentary means for mitigating its spread and the absence of an *mRNA vaccine technology*. From this, we can be optimistic that there will be an end to the COVID-19 pandemic. Until the COVID-19 pandemic subsides, however, it remains unclear what the true aftermath on our economy and society will be and how long it will take to realize. There are many interconnections in our complex society, and a shock to one sector often reverberates in others. Sometimes the effects occur close to the shock, sometimes long after; some shocks will be temporary and some long-lasting or even permanent.

Overall, it is likely that the pandemic will expose the resilience and vulnerabilities of gig work and other types of flexible employment relationships, while other effects upon the world of work remain to be seen. Governmental organizations, including the BLS, are proffering disclaimers with consideration to such unknown future outcomes. Illustratively, since mid-2020, the BLS labor market releases have indicated experts should reference labor market data with caution as the BLS's 2019-2029 projections have not included the impacts of the COVID-19 pandemic and subsequent re-

sponse efforts. The BLS has developed alternate scenarios for the 2019-2029 projections which have encompassed possible impacts from the pandemic (Wolf, 2020). Ultimately, the results from the alternate scenarios have demonstrated how changes in consumer behavior caused by the pandemic may alter the baseline projections for detailed occupations and industries. As is standard methodology, triangulating the available data related to the effects of COVID-19 to formulate and support expert opinions reaffirms the need to remain active as vocational practitioners instead of relying solely upon single-set data sources. A suggestion for best practice may be to include contemporary verbiage that indicates the opinions proffered are assuming “normal” labor market variability. Other disclaimer language may include an indication that the work product considered data sets most descriptive of the employment situation at the time the opinions were rendered.

Considerations for Future Research and Inquiry

It is important to examine the rules, knowledge, and attitudes developed during the current pandemic, and to determine if they will persist even after the COVID-19 pandemic ends. For example, monitoring trends such as whether remote work settings remain available, tracking whether jobs that have become classified as non-essential are eliminated in the future, as well as evaluating the effects of work-life balance over time.

It will be essential to monitor how or if the current market economy behaves differently from a traditional recession, and why it would or would not do so. This may be instrumental in determining if a pandemic-induced recession is merely an economic recession, or something entirely different, requiring novel solutions for repair. The same is true of monitoring which industries, if any, will be permanently impacted by the pandemic and determining if the landscape of the labor market permanently changes in the future or returns to its pre-pandemic trajectory. Similarly, paying attention to the accessibility of the COVID-19 vaccines and the longitudinal impacts of the vaccine on the labor market will be of value. Determining how access to broadband internet has been consequential to those with lower incomes and in rural areas for their employability, access to jobs, and use of virtual health care during the pandemic will provide further insight into the evolving socio-economic landscape. Monitoring how effective federal stimulus packages are in addressing delivery of broadband internet, as proposed, may also be helpful in keeping track of this issue.

The utility of data from past pandemics has appeared to be incompatible with current data sets and trends. However, it may be critical to track how data developed during the current pandemic will have utility in predicting the effects of future pandemics. This may also be instrumental in determining how the current pandemic influences the way vocational analyses are performed. As has been the case in most, if not all, sectors, vocational practitioners should consider how this pandemic impacts our work, particularly present and future analyses, changes in systems and delivery of goods services, as well as resources and how the pandemic may influence methodologies in the future.

Ultimately, whether there will be permanent methodological changes to vocational analyses because of the COVID-19 pandemic will rely upon many factors and variables, some of which may include: what we learn from how the pandemic influence future vocational plans, career counseling, and forensic opinions; whether there continue to be significant effects upon the labor market; how individuals with disabilities are impacted, both vocationally and economically; the fluctuation of wages and availability for “essential” and “non-essential” jobs and access to those jobs with evolving trends in novel occupational statuses; the net impact COVID-19 has on gender, racial and cultural inequality in employment; access to job opportunities and medical care; presumption of attempts to mitigate and ability to mitigate for injury, family law or employment discrimination cases; discovery of additional health concerns, longstanding physical or mental health problems that may arise in association with a COVID-19 diagnosis, or impacts of coping with the COVID-19 pandemic; what role technology continues to play to culturally and socially impact work, perceptions of work, future consumerism, and other industries after the pandemic dissipates; and finally, the overall economic legacy that the COVID-19 pandemic leaves behind.

Conclusion

As the United States transitions out of the first phases of COVID-19 adaptation, it has been clear that the vocational and economic landscape has changed, and adaptations will be reflected in the way that we approach the world of work moving forward. It is evident that analyses of vocational and economic conditions have followed suit. The immediate, short-term effects of the COVID-19 pandemic have been visible in changes to work, including arrangements, location, hours, and workloads. Changes have also been seen in worker attitudes, satisfaction with coworkers and supervisors, engagement, and work-life balance. Long-term effects must be investigated further and observed for potential fundamental changes in career development and/or job characteristics. Over time, researchers may choose to assess additional variables, such as lay-offs and employer restructuring, for more precise data pertaining to the impact of COVID-19 on workers and the labor market.

Reviewing workers' experiences during the period of the COVID-19 pandemic has the potential to inform employers on how to adapt employment relationships in the long-term. These could include minimizing turnover through support, promoting work performance, and improving the overall quality of their workforce. Further, flexible employment arrangements allow employees to become more aware of the impact of working conditions upon their health, work, and career development.

Although COVID-19 has provoked a global sense of social, economic, and personal uncertainty and has been the impetus for change on many levels, its legacy remains to be seen. Thus, the questions posed in this paper remain preliminary, as we have yet to see the full impact of the COVID-19 pandemic upon careers for all types of workers, as well as the economy as a whole. As the future unfolds, we will continue to have questions about what it holds and how we will function as practitioners moving forward.

As Soper (1919) mentioned in his discourse on the 1918 Pandemic, "We are still too close to the event to fully measure it" (p. 502). In accordance with Soper's (1919) thoughts, what is written here has only been an introductory view of the authors at present. It is speculative to speak authoritatively on the subject, and considering the parallels we have seen with COVID-19 and the 1918 pandemic, the best we can do at this time is to inform our opinions using the resources currently available. It remains critical to use peer-reviewed methodology, which is generally accepted within our fields of expertise to do so. We can use methodology and history to guide us and provide context for our approaches to vocational assessments in the age of COVID-19.

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