

Flexibility or Insecurity? Gig Work, Economic Security, and Health and Wellbeing

The “gig economy” is expansive, including services like Uber and TaskRabbit as well as business and creative freelancers on short terms projects. The growth of the gig economy has prompted a national conversation on how and when people work and how it shapes their health and personal lives. A growing body of literature examines how work structure shapes the wellbeing of workers. Its significance has led researchers to consider precarious employment an emerging social determinant of health. The gig economy, however, is a new phenomenon of the U.S. labor market that little research has yet explored. My research uses an innovative approach to collect previously unavailable survey data on gig work schedules and health and wellbeing from targeted samples of workers in the gig economy. I then use this data to show how dependence on earnings from gig work is associated with gig worker financial security, autonomy, health, and wellbeing.

Introduction

The “gig economy” is expansive, including services like Uber and TaskRabbit as well as business and creative freelancers on short terms projects. Various surveys estimate that 20%-30% of the U.S. working age population (18-64) engage in some type of contract work (Manyika et al. 2016) and that 4-8% of Americans use an online gig platform to earn money (Manyika et al. 2016; MBO Partners 2014; Smith 2016). The growth of the gig economy has prompted a national conversation on how and when people work and how it shapes their health and personal lives. Proponents of the gig economy argue that it allows people to have flexible work hours, receive better compensation, and attain the American dream. Others argue that as independent contractors, gig workers lose out on important benefits like sick leave and health insurance, work nonstandard hours, and still struggle to make ends meet.

A growing body of literature examines how work structure shapes the wellbeing of workers. Its significance has led researchers to consider precarious employment an emerging social determinant of health (Benach et al. 2004). The gig economy, however, is a new phenomenon of the U.S. labor market that little research has yet explored. In an effort to help fill the gap in our knowledge of the implications of the new and rapidly expanding gig economy on inequality, my research uses an innovative approach to survey data collection from targeted samples of workers in the gig economy that allow for collection of previously unavailable data on gig work schedules and health and wellbeing.

I focus on how dependence on earnings from gig work stratifies schedule control and autonomy, financial security, self-rated health, sleep, and emotional wellbeing. My research demonstrates how the new and rapidly expanding gig economy contributes to inequality for different groups. I pay close attention to stratification across race/ethnicity, gender, and life stage. Specifically, I ask:

1. How does schedule control and perceptions of autonomy differ by dependent on earnings from gig work?
2. How does economic security as seen in income volatility and measures of financial strain differ by dependence on earnings from gig work shape?
3. How does sleep, self-rated health, and emotional well-being differ by dependence on earnings from gig work affect?
4. How do schedule control, autonomy, economic security, and health and wellbeing of gig workers differ by race/ethnicity, gender, and life stage?

Background

Work Schedules and Wellbeing: In the past few decades, shifts in the labor market have caused workers to experience more instability, precarity, and risk related to their employment (Lambert 2008). Large-scale transformations in the labor market have led to a growth in contingent work (Kalleberg 2011), which includes contractors, temps, and on-demand workers (Kalleberg 2000). A growing body of literature examines how work structure shapes the wellbeing of workers. (Benach et al. 2004).

Perceived job insecurity is a chronic feature of nonstandard work that reduces job satisfaction and increases work-nonwork interference (De Witte and Naswall 2003; Burchell et al. 2005; Benavides et al. 2000; Benach et al. 2014). Part-time workers perceive more work-nonwork interference (Tausig and Fenwick 2001). Thus, while many assume that nonstandard work can create more family and personal time, the financial and career costs associated may shape workers’ perceptions of job insecurity (Glass & Camarigg 1992). Race, gender, and parental status influence work hours and schedule (Clawson and Gerstel 2014; Presser 2003b). Groups with limited job opportunities due to discrimination and lower human capital are more

likely to work nonstandard shifts (Presser 2003b; Johnson & Johnson 2005). Presser (2003b) found that when controlling for occupation, Blacks were more likely to than Hispanics and Whites to work nonstandard shifts. Perceived control over work schedules has been found to increase job satisfaction (Lyness et al. 2012) and decrease the amount of work-life conflict (Negrey 1984), or what researchers now call “work-nonwork interference” (Shieman et al. 2009). The ability to change work schedules not only reduces but often reverses the negative effects of working nonstandard shift on measures of quality of family life among married couples and single parents (Staines and Pleck 1986).

The definition of nonstandard work ignores shift work entirely (Presser 2003b). People often do shift work to accommodate school or childcare or to earn more (McMenamin 2007). Working nights or rotating schedules puts people out of sync with family and friends and may have negative consequences for the quality of family life and the stability of marriages (Presser 2003b; Staines & Pleck 1983).

Case of Study: The Gig Economy: Another form of nonstandard work popularized by technology is work in the gig economy. The gig economy is often understood as on-demand contract work that is facilitated by an online platform. Non-whites are especially likely to do gig work. Twelve to fourteen percent of blacks and 10-11% of Latinos participated gig work in 2016 (Smith 2016; Intuit and Emergent Research 2016). Men are more likely than women to work in the gig economy (66% men compared to 34% women) (Intuit and Emergent Research 2016). About half of Uber drivers are married and have children age 18 or below (Benenson Strategy Group 2015). Fifty-nine percent of women gig workers have spouses with full-time career who contribute to the household income (Hyperwallet 2017). Young adults (age 18-34) are most likely to work in the gig economy (Farrel and Grieg 2016). Twenty-three percent of gig workers are part-time or full-time students (Smith 2016). Seniors may be a growing demographic in the gig economy. Those ages 55 and older constitute 18% of the gig economy (Intuit and Emergent Research 2016).

A 2017 study of gig workers estimates that 27% of the workers sampled were dependent on gig work for their primary source of income; 42% were partially dependent, and 33% were supplemental earners (Schor et al. 2017). People with low and moderate incomes were more dependent on income from the gig economy (Farrel and Grieg 2016). Although young people are most likely to work in the gig economy, they are least reliant on income from the gig economy compared to older workers. Labor platform earnings (e.g. Uber, TaskRabbit, etc.), as opposed to capital platform earnings (e.g. Airbnb) represented about 23% of total annual income for workers age 18-34 compared to more than 28% of income workers age 45 and older (Farrel and Grieg 2016).

Control over schedule is an important motivation for working in the gig economy (Hall and Krueger 2015; Weber and Silverman 2015). Smith (2016) finds that 30% of gig workers say they do this type of work because they need to be able to control their own schedule due to school, child care, or other obligations. Seventy-four percent of Uber drivers reported that Uber had made their lives better by providing more control over their schedule (Hall and Kreuger 2015). Women Uber drivers were more likely than men to report needing “part-time or flexible schedules” because of a “family, education, or health reason” (Hall and Krueger 2015).

The average gig worker works about 12 hours per week and only 9.6% of workers report working more than 30 hours per week (Intuit and Emergent Research 2016). Schedule control and higher wages may be at odds since gig companies often pay workers more when demand is highest (Weber and Silverman 2015). Schor et al. (2017) found that workers who were dependent on gig work experienced less control over their schedule and less autonomy than those who were not dependent. Workers who were not dependent on gig work could be more

discriminating about which customers to accept, their working conditions, and their hours and schedule. Workers who were dependent on gig work felt more pressure to accept work more often and particularly when compensation is highest (Schor et al. 2017). Some workers chose to work rather than seeking medical attention when they needed it (Schor et al. 2017). Weber (2015) found that 49% of all respondents polled reported that peak hours and demand have the greatest impact on the hours they work, while many reported that their ideal workday conformed to a traditional 9-5 schedule (Weber 2015). Women's schedules, in particular, have an effect on their earnings. Recent research found a 7% pay gap between women and men Uber drivers that is explained, in part, by returns to experience (Cook et al. 2018). Women work less hours on average and are more likely to stop driving with Uber (Cook et al. 2018; Hyperwallet 2017). Because men are able to gain more experience, they are able to earn more.

There has been increased research on the effects of nonstandard work on wellbeing, but the effects of gig work have yet to be fully assessed (Tran and Sokas 2017). Available research on gig work suggests that financial dependence is a key stratifying mechanism in the gig economy. My research contributes to literature on the gig economy by examining how the gig economy might be stratified in other ways, particularly health and wellbeing.

Expected Effects of Financial Dependence on Gig Work on Health and Wellbeing

1. I expect that those dependent on earnings from gig work will be more likely to experience less control over their schedule and less autonomy.
2. I expect that dependence on earnings from gig work will be negatively related to economic security as seen in income volatility and measures of financial strain.
3. I expect that dependence on earnings from gig work will be negatively related sleep, self-rated health, and emotional well-being.
4. I expect that dependence on earnings from gig work will be highly correlated with race/ethnicity.

Methodology

Research and data on gig workers is lacking. Surveys on working conditions and health do not include information on gig workers and surveys that collect data on contract workers do separate out gig workers. I use an innovative method of collecting web-based surveys based on data collection by Schneider and Harknett (2016). Facebook collects data on users by harvesting user-reported information and inferring user characteristics from activity (Schneider and Harknett 2016). I use a targeted Facebook advertisement to recruit active user on Facebook who live in the United States, are between ages 18 and 68, and list a gig company as an employer or gig work as an activity. Respondents who click on the link in my Facebook advertisement are redirected to an online survey hosted through Qualtrics.

Schneider and Harknett (2016) use a targeted Facebook ad to study how work scheduling of retail workers affects health and family outcomes. The ad ran for five months in 2016 and generated 1,284,428 views and 28,410 clicks through to the survey with a click-through rate of 2.21%. Eighteen percent of users who clicked completed the survey and 0.4% of users who saw an ad completed the survey (Schneider and Harknett 2016). After excluding missing data, the analytic sample was 5,895 cases. I have conducted a pilot survey and gathered 194 responses over the course of two weeks and will be collecting data from a nationwide sample of gig workers. I aim to gather 5,000 cases over the course of five months.

Sampling bias is a limitation of this sampling method. Gig workers may be more likely to use social media since they use digital platforms for their jobs. For this reason, the Facebook sample may be similar to the gig worker population. Approximately 62% of the U.S. population uses Facebook regularly (Statista 2017). Thus, the sampling frame may be similar to coverage

of telephone surveys (Arcia 2014). Research has demonstrated that nonprobability samples drawn from non-traditional platforms, in combination with statistical adjustment, result in similar distributions of outcomes and estimates of relationships as probability-based samples (Schneider and Harknett 2016). With demographic information from other surveys on gig work, I will adjust our data to account for discrepancies.

Independent Variables: I measure dependence on earnings from gig work by asking if earnings from gig work are essential for meeting basic needs, an important component of the budget but not essential, or nice to have but they could live without it. I also ask if, in addition to gig work, respondents work a full-time job, a part-time job, or no other job.

Dependent Variables: I measure control over schedule and autonomy, financial security, sleep, self-rated health, sleep, and emotional wellbeing. I measure control over schedule and autonomy by asking questions about what influences the way workers schedule their work and use a locus of control scale. I measure financial security by asking how worried respondents are about not being able to pay their monthly bills. I measure self-rated health by using a five-category response scale (excellent, very good, good, fair, or poor). I measure sleep by asking how many hours of sleep that respondents typically get per night and how often they take medication to help them get to sleep each week. I measure emotional wellbeing by using questions the Center for Epidemiologic Studies depression scale (CES-D).

Controls: I will control for a number of work-related variables including but not limited to job tenure, earnings, household income, and educational attainment. I also control for number of children in household, marital status, age, gender, and race/ethnicity, school enrollment, and zip code.

Descriptive Results

Table 1 displays the descriptive results from a sample of 94 respondents who took the pilot survey. I am still analyzing results from the pilot survey and will present results from the full survey data at PAA.

Table 1. Descriptive Results on Gig Economy Working Conditions Study Pilot Survey

Mean number of hours worked per week	27.72
Gig work schedule typically stays the same each week	44%
Gig work schedule varies week to week	56%
Prefer to work more hours doing gig work	40%
Prefer to work 9am-5pm schedule	50%
Gig work earnings essential to daily needs	51%
Gig work earnings important but not essential	35%
Gig work earnings nice to have but not necessary	14%
Schedule gig work hours around personal/family obligations	52%
Schedule gig work hours around another job	16%
Schedule gig work hours based on whenever they can earn most money	32%
Worried or very worried about being able to pay monthly rent or mortgage	47%
Worried or very worried about being able to pay monthly credit card bill	48%

References Cited

- Arcia, A. (2014). Facebook advertisements for inexpensive participant recruitment among women in early pregnancy. *Health Education & Behavior, 41*, 237-241.
- Benach, J., Vives, A., Vanroelen, C., Tarafa, G., & Muntaner, C. (2014). Precarious Employment: Understanding an Emerging Social Determinant of Health. *Annual Review of Public Health, 35*:229-53.
- Benavides, F.G., Benach, J. Diez-Roux, A., Roman, C., (2000). How do types of employment related to health indicators? Findings from the second European survey of working conditions. *Journal of Epidemiological Community Health 54*, 494-501.
- Benenson Strategy Group. (2015). Uber Driver Roadmap.
- Burchell, B. Ladipo, D. & Wilkinson, F. (2005). *Job Insecurity and Work Intensification*. Routledge.
- Clawson, D., & Gerstel, N. (2014). Unequal Time: Gender, Class, and Family in Employment Schedules. *Russel Sage Foundation*.
- Cook, Cody. Diamond, R. Hall, J. List, Oyer, & P. (2018). The Gender Earnings Gap in the Gig Economy: Evidence from over a Million Rideshare Drivers.
- De Witte, H.D. & Naswall, K. (2003). 'Objective' vs 'Subjective' Job Security: Consequences of Temporary Work for Job Satisfaction and Organizational Commitment in Four European Countries. (2003). *Economic and Industrial Democracy 24*(2): 149-188.
- Farrel, Diana & Grieg, Fiona. (2016). The Online Platform Economy. JP Morgan Chase Institute.
- Glass, J. and Camarigg, V. (1992). Gender, parenthood, and job-family compatibility. *American Journal of Sociology, 98*, 131-151.
- Hall, J. V., & Krueger, A. B. 2015. An analysis of the labor market for Uber's driver-partners in the United States. *Princeton University Industrial Relations Section Working Paper, 587*.
- Hyperwallet. (2017). The Future of Gig Work is Female.
- Intuit and Emergent Research. (2016). Dispatches from the Gig Economy.
- Johnson, G.J. & Johnson, W.R. Cumulative Disadvantage Theory and Contingent Work: Race and Gender comparisons. Working Paper. Iowa State University.
- Kalleberg. (2000). "Nonstandard Employment Relations: Part-Time, Temporary and Contract Work." *Annual Review of Sociology 26*:341-65.
- Kalleberg, A. L. (2011). *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*. Russel Sage Foundation.
- Lambert, S. (2008). Passing the buck: Labor flexibility practices that transfer risk onto hourly workers. *Human Relations, 61*(9):1203-1227.

- Lyness, K.S., Gornick, J.D., Stone, P. & Grotto, A.R. (2012). It's all about control. *American Sociological Review*, 77(6): 1023-1049.
- Manyika, J, S. Bughin, J. Robinson, K, Mischke, J and D. Mahajan. (2016). "Independent work: Choice, necessity, and the gig economy." *McKinsey Global Institute*.
- MBO Partners. (2015). State of Independence in America 2015: Five Years of Insight on the Growth of the Independent Workforce.
- McMenamin, T. (2007). A time to work: recent trends in shift work and flexible schedules. *Monthly Labor Review*.
- Negrey, C. (1984). *Gender, time, and reduced work*. Albany: State University of New York Press.
- Presser, H.B. (2003). Race-Ethnic and Gender Differences in Nonstandard Work Shifts. *Work and Occupations*, 30(4): 412-439.
- Schor, J. B. (2017). Does the Sharing Economy Increase Inequality Within the Eighty Percent?: Findings from a Qualitative Study of Platform Providers. *Cambridge Journal of Regions*, forthcoming.
- Schieman, S., Glavin, P., & Milkie M.A. (2009). *American Sociological Review*, 74:966-988.
- Schneider, D. & Harknett, K. (2016) Schedule instability and unpredictability and worker and family health and wellbeing. Working Paper Series. Washington Center for Equitable Growth.
- Smith, Aaron. (2016). Gig Work, Online Selling and Home Sharing. Pew Research Center.
- Staines G.L. & Pleck, J.H. (1986). Work schedule flexibility and family life. *Journal of Occupational Behavior*, 7, 147-153.
- Statista. (n.d.). Facebook usage penetration in the United States from 2015 to 2022. In *Statista - The Statistics Portal*. Retrieved January 25, 2018, from <https://www.statista.com/statistics/183460/share-of-the-us-population-using-facebook/>.
- Tausig, M. & Fenwick, R. (2001). Unbinding Time: Alternate Work Schedules and Work-Life Balance. *Journal of Family and Economic Issues* 22(2): 101-119
- Tran and Sokas 2017 gig work health and wellbeing
- Weber, L. & Silverman, R.E. 2015. On-Demand Workers: 'We are not robots'. *Wall Street Journal*.