EDUCATION POLICY | RESEARCH ARTICLE

The gig economy comes to academia: Job satisfaction among adjunct faculty

Gesemia Nelson1*, Melissa J. Monson1 and Karam Adibifar1

Abstract: Colleges and universities in the United States have embraced the “gig” economy with use of non-tenure track and part-time faculty. However, much of the work on job satisfaction in academia focuses on tenure-line professors. This study seeks to answer the question of whether adjunct faculty look more like independent gig workers or contingent gig workers. Independent gig workers are their own boss and choose these jobs voluntarily. Contingent gig workers are similar to traditional workers in that they are not their own boss and are instead regular employees. However, they lack some of the advantages of a traditional job such as security. Data were collected from a university in the western United States. Adjunct professors reported similar levels of job satisfaction as their tenure-track and tenured counterparts. We conclude that at least some portion of adjunct faculty engage in contingent work voluntarily and are best categorized as independent gig workers.

Subjects: Higher Education Management; Study of Higher Education; Sociology of Education; Sociology; Contingent Workforce; Contingent Labour Market; Part-Time Work; University Education; College Education; Tertiary Education

Keywords: job satisfaction; contingent faculty; adjunct professors; gig economy; professor rank; non-tenure track faculty

ABOUT THE AUTHORS

Gesemia Nelson is Associate Professor of Sociology at Metropolitan State University of Denver. She received her master’s degree and doctorate in Sociology from Harvard University. Her areas of interest include inequality and applied sociology.

Melissa J. Monson is the Chair of the Department of Sociology and Anthropology at Metropolitan State University of Denver and an Associate Professor of Sociology. She received her Doctorate in Sociology from the University of Nevada, Las Vegas. Her research focuses on the impact of social inequality and equity.

Karam Adibifar is an Assistant Professor of Sociology at Metropolitan State University of Denver in Colorado. He completed his master’s degree from the University of Colorado in social sciences in 1997 and his doctorate in sociology from South Dakota State University in 2004. His areas of research interest include sociology of health and technology as in relation to alienation.

PUBLIC INTEREST STATEMENT

Universities all over the US are using part-time faculty at higher and higher rates. We know that job satisfaction of faculty impacts students yet most of the work on job satisfaction focuses on full-time, tenure-line faculty. This study adds to the nascent research on part-time faculty and seeks to answer the question of whether adjunct faculty look more like independent gig workers or contingent gig workers. Independent gig workers are their own boss and choose these jobs voluntarily. Contingent gig workers are similar to traditional workers in that they are not their own boss and are instead regular employees but lack some of the advantages of a traditional job. Part-time professors in our study reported similar levels of job satisfaction as their tenure-track and tenured counterparts. We conclude that at least some portion of adjunct faculty engage in contingent work voluntarily and are best categorized as independent gig workers.
1. Introduction

Higher education, once reserved for the elite, has become increasingly accessible to the average American. Indeed, there has been significant growth in college attendance from 19th century until today. In 1869–70, the years that the federal government began collecting statistics, only about 1 per cent of 18–24 year olds were attending colleges and universities (Snyder & National Center for Education Statistics, 1993). By 2015, this figure had grown to 35.6 per cent (National Center for Higher Education Management Systems [NCHEMS], 2015) and by 2017 it was over 40 per cent (Chronicle of Higher Education, 2017). College attendance has also grown among “older” students. In 2018, 7.6 million students will be 25 or older (National Center for Education Statistics [NCES], 2018). Projections say that close to 2 million bachelor’s degrees will be awarded during 2018–2019 (NCES, 2018). Higher education, as a sector, involves not only the students who attend colleges and universities, but also the employees who staff them. These institutions enlist nearly 3 million full-time employees that work in more than 7,000 colleges and universities in the US (Dancy & Laitinen, 2015). Higher education has become part of the fabric of American communities. According to the New America think tank, there are, on average, 16 colleges in each congressional district. The “schools in each district employ over 6,000 full time faculty, staff, and administrators and spend over a billion dollars on total operating costs” (Dancy & Laitinen, 2015). As a sector, higher education impacts millions of people whether they be students pursuing degrees or the employees charged with making this possible. Understandably, much attention is focused on how students feel about their experience. Numerous research studies find that faculty members have a clear impact on student satisfaction (Bini & Massarini, 2016; Climes et al., 2008; Clifton & McKillup, 2016; Yin et al., 2016). Research also shows that job satisfaction leads to favourable outcomes for clients/customers (Gazzoli et al., 2010; Lee et al., 2013). Therefore, understanding faculty job satisfaction carries implications not just for faculty themselves, but for the students they serve. In the next section we discuss the literature on job satisfaction. Then we explore the changing demographics of the academic workforce. We show how colleges and universities have embraced the “gig” economy with use of non-tenure track and part-time faculty and explain how work on faculty job satisfaction has not taken account of these changes. Finally, we present data about faculty satisfaction that includes this “new” academic workforce.

1.1. Job satisfaction

The term “job satisfaction” was first described by Hoppock (1935). He referred to it as a combination of physiological, psychological and environmental conditions that cause people to say, “I am satisfied with my job”. Job satisfaction is how people perceive and feel about their accomplishment. Kalleberg defines job satisfaction as “an overall effective orientation on the part of individuals toward work roles which they are presently occupying” (Kalleberg, 1997, p. 126). According to Cranny, Smith, and Stone (1992, p. 1), “Job satisfaction is an emotional status and an affective reaction to a job that results from the incumbent’s comparison of actual outcomes with those that are desired.” All of these definitions suggest job satisfaction describes a sense of pleasure felt by people during interaction with their work, people, and work process.

Studies have shown that job satisfaction among workers in different industries leads to favourable outcomes for employers, employees, and customers. For employers, job satisfaction tends to increase productivity (Arnold et al., 2016; Böckerman & Ilmakunnas, 2012; Fassoulis & Alexopoulos, 2015; Hsieh, 2016; Krishnan et al., 2018) and decrease absenteeism (Kass et al., 2001; Siu, 2002). For employees, job satisfaction is correlated with decreased emotional exhaustion, lower stress, higher health-related quality of life, and increased motivation for further training (Ensour et al., 2018; Gazzoli et al., 2010; Hayes et al., 2015; Ioannou et al., 2015). Job satisfaction has also been found to increase employees’ customer orientation thereby having positive results for clients who use the organization’s services (Gazzoli et al., 2010; Lee et al., 2013). Given its positive associations, researchers have explored the factors that contribute to job satisfaction. These kinds of analyses have occurred in many different work environments and industries, including higher education. Much of the work in higher education has focused on faculty. Faculty do the “core” work (teaching and research) of these institutions. Moreover, studies have found that
interaction with faculty and teaching efficiency impact student satisfaction (Bini & Masserini, 2016; Clemes et al., 2008; Clifton & McKillup, 2016; Yin et al., 2016). Knowledge of faculty satisfaction and motivation is important both because of the impacts on the faculty themselves and because of the impacts on students.

1.2. Faculty job satisfaction
What exactly leads to job satisfaction? The seminal theoretical work on the subject was written by Herzberg (1959) (see also Herzberg (1968) & (Herzberg, 2003) in Harvard Business Review). In it, he argued that there are two categories of factors, intrinsic and extrinsic, that drive job satisfaction. Motivator factors are intrinsic to the job. These include things like the work itself, growth, advancement, responsibility, and recognition. Hygiene factors are extrinsic to the job and include things such as salary, benefits, security, supervision, working conditions, and company policy. Since the publication of his theory and the empirical evidence underlying it, Herzberg's ideas have enjoyed healthy scrutiny. Methodologically, some have argued that the incident-content analysis he used is flawed and that his data is method-dependent (Bassett-Jones & Lloyd, 2005; Sachau, 2007; Siemens, 2005). They have also noted that his initial sample of engineers and accountants is not necessarily generalizable to other kinds of workers. Conceptually, observers have noted that what qualifies as either motivators or hygiene can be subjective (Siemens, 2005). For example, salary (which is a hygiene factor) could rightly be seen as a form of recognition (recognition being classified as a motivator). Additionally, Herzberg argued for the existence of causal relationship between job satisfaction and productivity: employees that are satisfied will work harder. However, there is not necessarily a direct link between job satisfaction and work performance. People who dislike their jobs tremendously may work very hard while people who are very satisfied may not. Despite these shortcomings, Herzberg’s two factor analysis continues to be held up as an important foundational theory (Sachau, 2007; Siemens, 2005). His article “One More Time: How Do You Motivate Employees?” is one of Harvard Business Review’s most requested reprints (Siemens, 2005). Its enduring relevance lies mainly in the acknowledgment that “all parts of the work and the workplace” need to be considered when thinking about job satisfaction (Siemens, 2005). It is in this spirit that we utilize Herzberg’s typology. We also want to note that Herzberg was interested in job satisfaction primarily from the standpoint of organizations and managers. Motivating staff and increasing productivity is certainly one potential by-product of job satisfaction. However, job satisfaction is important beyond this limited realm. It has implications for customers/clients, and for the quality of life of employees themselves.

Research has provided empirical support for Herzberg’s claim that various factors, both intrinsic and extrinsic, are linked to job satisfaction. Motivators (intrinsic factors) are consistently cited as important for professor satisfaction (Absher, 2009; Bozeman & Gaughan, 2011; Marston & Brunetti, 2009). For example, one study found that satisfaction in working with students, joy in teaching one’s subject, and freedom in the classroom lead to professional satisfaction among experienced professors at a liberal arts college (Marston & Brunetti, 2009). Another study of academics in political science found that being nominated for awards (and therefore being recognized for their work) increased job satisfaction. Yet another found that the ‘strongest predictor of job satisfaction’ is for the respondent’s research to be recognized by departmental colleagues (Bozeman & Gaughan, 2011, p. 177). One of the biggest “awards” one can get in academia is tenure. As one article argued, “being awarded tenure is an explicit recognition of belonging by proximate and distal university colleagues” (Bozeman & Gaughan, 2011, p. 177). Numerous studies find that getting tenure increases job satisfaction (see Bozeman & Gaughan, 2011; Sabharwal & Corley, 2009). Similarly, being promoted to full professor increases job satisfaction. In study after study, full professors report the highest level of satisfaction (Bernat & Holschuh, 2015; Hesli & Lee, 2013; Sabharwal & Corley, 2009).

Hygiene (extrinsic) factors receive even more attention in the research than motivators. Not surprisingly, salary is among the top things discussed. Generally speaking, studies show
that a higher salary tends to increase satisfaction among professors (Barnes & Mertz, 2018; Hagedorn, 1994; Sabharwal, 2011; Wang & Liesveld, 2015; Webber & Rogers, 2018). Professors are more satisfied if they feel their pay reflects their market value (i.e. is “fair” compared to their colleagues) (Bernat & Holschuh, 2015; Bozeman & Gaughan, 2011; Narisada & Schieman, 2016). Indeed, absolute salary levels are less important than relative salary compared to colleagues. For example, one study found that “more dissatisfaction occurred when female faculty members perceived their salary as being less than that of their comparable male colleagues than when they felt that all faculty (regardless of gender) were underpaid” (Hagedorn, 2000. p. 12). The importance of salary comparisons in job satisfaction is consistent with findings from other industries (Narisada & Schieman, 2016; Watson et al., 1996). The work environment is another hygiene factor consistently found to impact job satisfaction. When faculty members perceive the environment to be more collegial, they are more likely to be satisfied (Absher, 2009; Barnes & Mertz, 2018; Hesli & Lee, 2013; Lane et al., 2010; Sabharwal, 2011; Victorino et al., 2018; Zábrodská et al., 2014). For example, one study found that the “more respect both men and women faculty members perceived from colleagues, the higher their job satisfaction” (McCoy et al., 2013). Another study looking at over 4,000 tenure-track faculty across the country found a “strong, positive, and highly significant [statistical] relationship between faculty collegiality and job satisfaction” (Victorino et al., 2018).

1.3. Contingent faculty and the gig economy

Previous studies have certainly been important to the understanding we have about faculty job satisfaction. What these studies often fail to take account of is the changing demographics of faculties around the country. Higher education is undergoing a shift, like many industries. Some analysts have termed this changing economic reality the “gig economy”. The gig economy is best defined as “independent workers freelancing or contracting for short-term engagements and temporary positions” (Nye, 2018). Researchers have noted that temporary employment is nothing new. For example, one study cites the creation of Avon in 1886, Tupperware in 1946, and Mary Kay in the 1960s (Gleim et al., 2019). All these companies created employment options outside the traditional full-time, 9-to-5, model (Gleim et al., 2019). However, the tools used to create these temporary arrangements are new. Moreover, the scale of the change is affecting the work environments people are likely to see in the future. Companies such as Uber and TaskRabbit have been the public face of this trend but “gig” jobs occur in many industries with workers of varying skill levels. These jobs are no longer niche, reserved for artistic types such as writers and musicians. Many Americans are picking up a “side hustle”. According to a Gallup Poll, 36 per cent of Americans (57 million people) participate in the gig economy (McFeely & Pendell, 2018).

Not surprisingly, the academy has entered the gig economy as well. Gig jobs exist on both the teaching and research side. On the research side, “freelancers” are picking up short-term projects such as statistical review and literature searches (Kwok, 2017). For example, about 3200 workers with degrees in physical or life sciences sell their services on the online platform Kolabtree.com (Kwok, 2017). LabMate.us, another site, matches researchers with consulting projects at biopharmaceutical companies (Kwok, 2017). On the teaching side of academia, the trends in gig jobs are even more striking. Academia uses the term “contingent” faculty. The jobs to which they refer provide clear examples of the gig economy. According to the American Association of University Professors (AAUP) (2018), contingent faculty can be either part-time or full-time. “Their common characteristic is that institutions make little or no long-term commitment to faculty holding these positions” (AAUP, 2018) Furthermore, over the past 40 years, academic institutions have used contingent faculty at increasingly higher rates. In 1975, 10 per cent of the academic labour force was full-time non-tenure track faculty (AAUP, 2018). This number increased to 14 per cent in 1995 and 17 per cent in 2015. The numbers for part-time faculty are even larger. In 1975, nearly a quarter of faculty was part-time (AAUP, 2018). By1995, one-third fell into this category. By 2015, 40 per cent of the academic labour force was
part-time. The end result by 2015 was that 57 per cent of the academic labour force was contingent faculty while only 29 per cent were either tenure or tenure track (AAUP, 2018).

Public discourse on the gig economy is split. Some argue that the gig economy gives workers more control and allows them to be entrepreneurial. It also allows workers to “mitigate economic risk by diversifying income streams” (Kuhn, 2016). Others argue that gig jobs actually degrade the quality of work. For example, some workers in the temporary labour force report “difficulty collecting payments they are owed” (Kuhn, 2016). Another study using the General Social Survey (a representative sample of the US non-institutionalized population) found that part-time employment and an irregular, non-daily regime decreased job satisfaction (Humpert, 2016). McFeely and Pendell (2018) argue that both the proponents and opponents of the temporary labour market have a point. They posit the existence of two types of “gig” economy jobs: independent workers and contingent workers. Independent workers are their own boss. These include people such as online platform workers and independent contractors. For proponents, this group exemplifies the benefits of the gig economy. Independent workers report “high levels of work-life balance, flexibility, autonomy, meaningful feedback, and creative freedom” (McFeely & Pendell, 2018). In fact, they tend to be more satisfied with these aspects of their jobs than even full-time workers in traditional jobs (McFeely & Pendell, 2018). Contingent workers, on the other hand, provide a cautionary tale for all those who are suspicious of the gig economy. Contingent workers are actually more similar to traditional workers in that they are not their own boss and are instead regular employees. However, they lack some of the advantages of a traditional job such as security and benefits (McFeely & Pendell, 2018). Not surprisingly, contingent workers report lower levels of satisfaction when compared to independent workers. For example, they are less likely to feel a sense of belonging in the workplace, less likely to say they are passionate about work, less likely to feel that they have autonomy and authority, and less likely to feel that they are stable and secure (McFeely & Pendell, 2018).

While we know that gig workers are being used to a much greater degree in academia, it is an open question whether these workers look more like independent gig workers or contingent gig workers. Anecdotal evidence is varied. In 2017, the journal Nature profiled several academics working in the “gig” economy (Kwok, 2017). Some of the sentiments seemed to point to gig work that was more contingent (and involuntary) rather than independent (and voluntary). One scientist reported applying for traditional academic jobs (where there were 200 applicants for each position) without success for two years. Gig work was a way to “keep afloat” by “providing an income stream while you figure stuff out”. Gig work can also “give you time to mourn the loss of a job in academia that you thought you were going to have” (Kwok, 2017). We have heard similar sentiments from adjunct faculty who take temporary positions because they are unable to find full-time tenure-track jobs. Indeed, according to the AAUP (2018), contingent faculty, especially part-time faculty, receive low pay often without health or retirement benefits. Contingent faculty appointments can also lack stability. Large proportions of contingent faculty are paid by the course and may not be sure from semester to semester if they will even receive any teaching assignments. And even though they may be classified as “part-time”, contingent faculty often “actually teach the equivalent of a full-time course-load” (AAUP, 2018) Other academics profiled in the Nature piece, however, embraced gig work more readily. One academic who moved back to Singapore, said she wanted to work from home after her second postdoc ended. Another researcher from the UK said, “The common denominator between all the freelance scientists I know is location. We want to choose, geographically, where we’re going to work. At some point, you don’t want to move any more” (Kwok, 2017). He acknowledges that for some, freelance work may be too stressful. For himself, though, he “loves the freedom” (Kwok, 2017).

One would expect these different realities to inform research on job satisfaction in academia. However, even as the percentage of contingent faculty has reached over 50 per cent, the majority of research on the academic labour force continues to focus on tenured and tenure-track faculty. While this work provides interesting data, it is an empirical question whether these same trends
extend to contingent faculty (and in particular, to part-time faculty). Our investigation seeks to contribute to the literature in three important ways. First, its main focus is on contingent faculty, specifically part-time faculty. Most studies that look at academia only sample full-time tenure and tenure-track faculty (Barnes & Mertz, 2018; Bernat & Holschuh, 2015; Bozeman & Gaughan, 2011; Carson et al., 2001; Hesli & Lee, 2013; Marston & Brunetti, 2009; Ortiz et al., 2015; Sabharwal & Corley, 2009; Webber & Rogers, 2018). For example, one study notes in its introduction that “[r]ecent changes in higher education require continued study of faculty members” and that the “the shift to more part-time and non-tenure track positions may further bifurcate the profession” (Webber & Rogers, 2018). Then, the study goes on to only use data from 30,000 “tenure-stream” professors. Even in the studies that do take a serious look at contingent faculty, their focus may exclude part-time faculty altogether (Ott & Cisneros, 2015). This focus on tenure/tenure-track faculty (or even full-time non-tenure track faculty) is at odds with the reality of the changing academic workforce. Any comprehensive understanding of the workforce must pay attention to part-time faculty as well as full-time faculty. Second, this study focuses on one institutional context. In the few studies that have been done on contingent faculty, the focus tends to be on only that category of faculty with little or no comparative attention given to other categories of faculty at that same institution. This is obviously important work; however, you cannot understand job satisfaction and rank in a vacuum. It would be instructive to see how contingent faculty members feel about their job as compared to other faculty at the same institution. Finally, this study adds to the discussion about the gig economy and the different type of workers that occupy the space. It seeks to answer the question of whether adjunct faculty look more like independent gig workers or contingent gig workers.

2. Methods

Data for this paper were collected at a public 4-year university in the western United States with a student population over 20,000 in 2015 (the year data were collected). It is primarily a nonresidential undergraduate institution with a limited number of master’s programs. There is mix of full and part-time students along with a high proportion of students transferring in from other colleges and universities (Carnegie Classification of Institutions of Higher Education, 2020). The Faculty Senate of the university commissioned a longitudinal survey of the entire faculty (to be conducted every three years). The survey focused on campus climate and job satisfaction. With the approval of the university Institutional Review Board and Faculty Senate the authors of this study were granted access to the data.

The Dillman Design Method was used in order to achieve higher response rates. This meant that faculty members were contacted five (5) times using a variety of means (email and paper correspondence) in order to encourage participation in the survey. All faculty members teaching classes in fall 2015 were included in the sampling universe (1420 faculty members total; 592 full-time faculty and 828 part-time faculty). Each group received slightly different versions of the survey. Full-time and adjunct faculty positions have different job requirements and the surveys were adjusted to reflect this.

The key independent variable in our analysis is academic rank. We opted to group faculty into three categories: adjunct professors, tenure-track (assistant) professors, and tenured (associate/full professors). Thus, adjunct faculty are compared to their tenure-track and tenured colleagues. These divisions correspond to job characteristics that are qualitatively unique. Adjunct professors are part-time employees who are not on a tenure track and have no long-term contracts. This group exemplifies the gig economy. Adjunct faculty work on a contingent basis, semester to semester. Even if they are offered classes in a given semester, their offer may be revoked because of low enrolment or because a full-time faculty member needs an extra class. Their salaries are relatively low, they do not receive health benefits, and they do not have job security. In fact, university policy explicitly prevents them from being offered a full-time course load (which would then require them to receive health benefits). Tenure-track faculty (usually with rank of assistant professor), in contrast, work on a full-time basis and receive much higher salaries than adjuncts.
Their contracts are renewed each year and guaranteed (i.e. low enrolment and cancelled classes do not affect their salary). Thus, they have more job security. Tenured professors (with rank of associate or full professor) enjoy the most job security of all three groups (along with the same benefits afforded to other full-time faculty members). They also tend to have higher salaries compared to tenure-track faculty in their same department.

The survey asked questions about satisfaction on a number of different dimensions. We have grouped these dependent variables according to Herzberg’s typology. Thus, we look at: motivators (intrinsic factors), hygiene (extrinsic factors), and overall satisfaction (see Table 1).

3. Results

As noted in the methodology, the entire faculty population was also our sample. It is instructive to look at response rates by rank as this will provide some insight into the discussion that follows. Response rates varied widely between different types of faculty. The majority (54.4 per cent) of full-time faculty (e.g., tenure-track faculty, tenured faculty) responded to survey request and returned the questionnaire. However, only about one-quarter (26 per cent) of adjunct faculty did the same. We will return to this later in the discussion section.

Table 2 presents demographic data for the sample. More than 42.6 per cent of respondents held the title of adjunct faculty. The rest of the sample held a title designating them as full-time faculty members. Nearly two-third of respondents were untenured. The sample was about evenly split between males and females. The majority self-identify as White and heterosexual.

Table 3 presents univariate analysis on motivators, hygiene, and overall satisfaction. Motivators are intrinsic factors to the job, which include recognition and growth/advancement. The survey asked numerous questions about receiving recognition and one about advancement/growth. Generally speaking, respondents felt recognized for their work by colleagues. When asked to assess the statement “my work is valued by my peers”, 41.3 per cent of respondents “strongly agreed” and another 45.6 per cent “somewhat agreed”. Similar numbers can be seen when respondents were asked about their time being valued by colleagues. However, faculty members were more divided when asked about recognition from administration. Just over half of respondents showed some level of agreement that administrators valued their time, while the other half (44.9 per cent) showed some level of disagreement. There was one question on the survey that touched on the issue of advancement/growth. Respondents were generally positive about this.

| Table 1. Survey questions | Hygiene (Extrinsic factors) | Overall satisfaction with … |
|---------------------------|-----------------------------|-----------------------------|
| Motivators (Intrinsic factors) |                            |                             |
| My work is valued by my peers | I am compensated fairly compared to other faculty in my department | Department |
| My work is valued by the administration | I am compensated fairly compared to faculty at other institutions | College |
| My colleagues treat me with respect | Satisfaction with Salary | Administration |
| My time is valued by my colleagues | Satisfaction with health care benefits | University |
| My time is valued by the administration | Satisfaction with retirement benefits | |
| I receive useful feedback regarding my performance | Satisfaction with summer pay | |
|                            | Satisfaction with tuition reimbursement | |
|                            | Satisfaction with tuition for family | |
When asked to assess the statement “I receive useful feedback regarding my performance.” More than 24 per cent of respondents “strongly agree” and another 41.9 per cent “somewhat agree.”

Views about hygiene factors can also be found on Table 3. Faculty members provided proportionally more negative reviews when asked about their compensation in relation to those around them. For example, when assessing the statement “I am compensated fairly compared to faculty members at other institutions”, a significant plurality (46.6 per cent) said they “strongly disagree” while 28.7 per cent “somewhat disagree.” Data are also shown for satisfaction with different forms of compensation. The majority of respondents were either “very dissatisfied” or “somewhat dissatisfied” with their salary and health care benefits. They were marginally happier with summer pay.

Respondents were most pleased with retirement benefits with 42.8 per cent saying they were “somewhat satisfied” and 18.5 per cent saying they were “very satisfied”.

Faculty responses showed interesting patterns when asked about overall satisfaction. Generally, faculty members were more satisfied with the organizational groups that were closest to them and with which they interacted on a regular basis. Faculty members were most satisfied with their department with nearly 53 per cent saying they were “very satisfied” and over 30 per cent saying they were “somewhat satisfied”. They were slightly less satisfied with their college and least satisfied with the administration.

| Table 2. Demographics | Frequency | (%) |
|------------------------|-----------|-----|
| Rank (n = 495)          |           |     |
| Adjunct                | 211       | 42.6|
| Visiting assistant     | 12        | 2.4 |
| Assistant              | 85        | 17.2|
| Associate              | 94        | 19.0|
| Full                   | 93        | 18.8|
| Tenure (n = 524)       |           |     |
| Tenured                | 193       | 36.8|
| Non-tenured            | 331       | 63.2|
| Gender (n = 487)       |           |     |
| Men                    | 241       | 49.5|
| Women                  | 246       | 50.5|
| Race/ethnicity (n = 456) |         |     |
| White (non-Hispanic)   | 366       | 80.3|
| Black/African American | 11        | 2.4 |
| Latino/Hispanic        | 25        | 5.5 |
| Asian/Pacific Islander | 20        | 4.4 |
| Native American/Native Alaskan | 2 | 0.4 |
| Other                  | 32        | 7.0 |
| Sexual orientation (n = 480) |     |     |
| Heterosexual           | 422       | 87.9|
| Gay/lesbian            | 29        | 6.0 |
| Bisexual               | 17        | 3.5 |
| Other                  | 12        | 2.5 |

Nelson et al., Cogent Education (2020), 7: 1786338
https://doi.org/10.1080/2331186X.2020.1786338
Table 3. Motivators, hygiene, and overall satisfaction

| Motivator                                                                 | Strongly agree (%) | Somewhat agree (%) | Strongly disagree (%) | Strongly disagree (%) | Total (%) |
|---------------------------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------|
| My work is valued by my peers                                           | 203 (41.3)         | 224 (45.6)         | 41 (8.4)              | 23 (4.7)              | 491 (100) |
| My work is valued by the administration                                  | 137 (28.5)         | 197 (41.0)         | 79 (16.5)             | 67 (14.0)             | 480 (100) |
| My colleagues treat me with respect                                      | 296 (56.5)         | 162 (30.9)         | 47 (9.0)              | 19 (3.6)              | 524 (100) |
| My time is valued by my colleagues                                       | 183 (37.3)         | 215 (43.9)         | 71 (14.5)             | 21 (4.3)              | 490 (100) |
| My time is valued by the administration                                  | 104 (22.1)         | 155 (33.0)         | 113 (24.0)            | 98 (20.9)             | 470 (100) |
| I receive useful feedback regarding my performance                       | 124 (24.2)         | 215 (41.9)         | 105 (20.5)            | 69 (13.5)             | 513 (100) |
| I am compensated fairly compared to other faculty in my department       | 97 (21.5)          | 149 (33.0)         | 88 (19.5)             | 117 (25.9)            | 451 (100) |
| I am compensated fairly compared to faculty at other institutions         | 31 (6.7)           | 84 (18.1)          | 133 (28.7)            | 216 (46.6)            | 464 (100) |

| Hygiene factors                                                           | Very satisfied (%) | Somewhat satisfied (%) | Somewhat dissatisfied (%) | Very dissatisfied (%) | Total (%) |
|--------------------------------------------------------------------------|--------------------|------------------------|--------------------------|----------------------|-----------|
| Salary                                                                   | 48 (9.2)           | 163 (31.3)             | 162 (31.2)               | 147 (28.3)           | 520 (100) |
| Health care benefits                                                     | 62 (14.7)          | 121 (28.6)             | 86 (20.3)                | 154 (36.4)           | 423 (100) |
| Retirement benefits                                                      | 80 (18.5)          | 185 (42.8)             | 67 (15.5)                | 100 (23.1)           | 432 (100) |
| Summer pay                                                               | 52 (14.2)          | 140 (38.4)             | 71 (19.5)                | 102 (27.9)           | 365 (100) |
| Tuition reimbursement                                                    | 9 (4.9)            | 27 (14.8)              | 28 (15.4)                | 118 (64.8)           | 182 (100) |
| Tuition for family                                                       | 4 (2.1)            | 16 (8.4)               | 21 (11.0)                | 150 (78.5)           | 191 (100) |
| Satisfaction with Department                                             | 280 (52.9)         | 162 (30.6)             | 53 (10.0)                | 34 (6.6)             | 529 (100) |
| Satisfaction with College                                                | 151 (31.8)         | 230 (48.4)             | 68 (14.3)                | 26 (5.5)             | 475 (100) |
| Satisfaction with Administration                                         | 93 (19.7)          | 191 (40.6)             | 115 (24.4)               | 72 (15.3)            | 471 (100) |
| Satisfaction with University                                             | 164 (31.5)         | 259 (49.8)             | 67 (12.9)                | 30 (5.8)             | 520 (100) |

As previously noted however, faculty members at different ranks experience different realities at work. Tables 4–6 provide data on the relationship between rank, motivators, hygiene and overall job satisfaction. Table 4 provides data on how rank is related to motivators (intrinsic job factors). Respondents were asked their level of agreement with the statements on a 4-point scale running from 1 to 4 (the higher the number, the more likely respondents were to agree with the statement). A higher number, therefore, expresses more satisfaction while a lower number expresses...

Table 4. Mean satisfaction scores with motivators (Intrinsic factors) by rank

| Motivator                                                                 | Adjunct | Tenure-track | Tenured |
|---------------------------------------------------------------------------|---------|--------------|---------|
| My work is valued by my peers**                                          | 3.20    | 3.48         | 3.16    |
| My work is valued by the administration*                                 | 2.72    | 3.09         | 2.79    |
| My colleagues treat me with respect**                                    | 3.45    | 3.58         | 3.26    |
| My time is valued by my colleagues***                                    | 3.17    | 3.39         | 2.99    |
| My time is valued by the administration*                                 | 2.61    | 2.72         | 2.39    |
| I receive useful feedback regarding my performance                       | 2.81    | 2.86         | 2.64    |

ANOVA * = significant at .05 ** = significant at .01 *** = significant at .001.
less satisfaction. The table provides means for groups of faculty members at different ranks. Analysis of variance (ANOVA) was also conducted to determine if the difference in the means was statistically significant. Where statistically significant relationships were found, a post hoc Tukey test was performed to find which pairs were significantly different from each other. A fairly consistent pattern emerges when we look at the differences in motivator satisfaction by faculty rank. Adjunct faculty were NOT consistently the least satisfied group, something we would expect if our respondents looked more like contingent gig workers. In several instances, it was the highest ranked faculty members (tenured professors) that are least satisfied while assistant professors are the most satisfied. For example, the mean for the statement “my work is valued by my peers” was 3.48 for tenure-track professors, 3.20 for adjunct professors, and 3.16 for tenured professors. The difference in mean scores between tenure-track professors and everyone else was statistically significant. However, the difference in scores between adjuncts and tenured professors was not statistically significant. A similar pattern in mean scores exists for the statement “my colleagues treat me with respect.” Assistant professors had the highest mean (3.58), adjunct professors were in the middle (3.45), and associate and full professors had the lowest mean (3.26). For this measure, we find that tenured professors differed significantly from both adjuncts and tenure-track professors. However, tenure-track professors and adjunct were not significantly different from each other. The same pattern emerges with the statements “my time is valued by the administration.” For these last two measures, tenured and tenure-track faculty differed significantly from each other. However, adjunct professor scores were not statistically different from either tenured or tenure-track faculty. This outcome is surprising. The highest ranked faculty members who responded to the survey are less satisfied when asked about intrinsic factors of their job than adjunct faculty even though adjunct faculty positions enjoy less security, much lower pay, and few benefits.

Table 5 contains more detailed questions about compensation (hygiene factors). Faculty members at different ranks continue to show statistically significant differences. However, the pattern varies depending on how the question was phrased and the type of compensation under consideration. When asked if they were compensated fairly compared to other faculty in their department, adjunct faculty had the lowest mean score, 2.14, compared to 2.91 for tenure-track professors and 2.68 for associate professors. The difference in the means is statistically significant for adjuncts when compared to everyone else. When asked about being compensated fairly as compared with faculty at other institutions, tenure-track professors had the lowest mean satisfaction score (1.58) while adjunct professors had the highest relative satisfaction score (2.09). Tenured professors were in the middle with a score of 1.73. Adjunct scores differed significantly from tenured and tenure-track faculty. These results suggest that when asked about their departments, professors made compensation comparisons with colleagues of different ranks. However, when asked about other institutions, respondents compared their

| Table 5. Mean scores satisfaction with hygiene factors by rank |
|---------------------------------------------------------------|
|                                                              |
| Adjunct | Tenure-track | Tenured |
|---------------------------------------------------------------|
| I am compensated fairly compared to other faculty in my department*** | 2.14 | 2.91 | 2.68 |
| I am compensated fairly compared to faculty at other institutions*** | 2.09 | 1.58 | 1.73 |
| Satisfaction with ... salary | 2.17 | 2.12 | 2.27 |
| Satisfaction with ... health care benefits*** | 1.29 | 2.63 | 2.65 |
| Satisfaction with ... retirement benefits*** | 2.05 | 2.89 | 2.78 |
| Satisfaction with ... summer pay*** | 1.84 | 2.67 | 2.60 |
| Satisfaction with ... tuition reimbursement | 1.38 | 1.82 | 1.62 |
| Satisfaction with ... tuition for family | 1.35 | 1.46 | 1.23 |

ANOVA * = significant at .05 ** = significant at .01 *** = significant at .001.
compensation packages to colleagues of similar ranks. Thus, adjunct faculty were least satisfied when comparing themselves to departmental colleagues since they do in fact receive less compensation. However, they are relatively more satisfied when looking outside their department because in this last case we posit, they compare themselves to other adjunct faculty (rather than the professoriate as a whole). Previous research supports this conclusion. A study by Feldman and Turnley (2004) found that “[a]djunct faculty who compared themselves to permanent or core faculty experienced more relative deprivation than those who compared themselves with other contingent academics.”

Another set of questions on the survey asked about compensation in a different way. Rather than making an explicit comparison with another group and asking about compensation in general, it asked about the respondent’s level of satisfaction with specific forms of compensation. When asked in this way, the results vary from above. Not surprisingly (given that they are the highest paid group of faculty), tenured professors were most satisfied with their salary with a mean of 2.27, compared to 2.12 for tenure-track professors and 2.17 for adjunct professors. These differences however were not statistically significant. There were statistically significant differences in satisfaction with health care benefits, retirement benefits, and summer pay. Adjunct faculty were significantly less satisfied with health care benefits, retirement, and summer pay than anyone else. However, the difference in means between tenured and tenure-track faculty is not statistically significant. These data are not terribly surprising. Adjunct faculty who receive low salaries, no health benefits and modest to no retirement benefits are the least satisfied with these forms of compensation.

Table 6 contains information about overall satisfaction scores. In every case, we see mean satisfaction scores highest for tenure-track professors, lowest for tenured professors, with adjunct faculty in the middle. In two domains, satisfaction with school/college and satisfaction with the university, results are statistically significant. For example, when asked about university as a whole, tenured professors had a mean of 2.92 while adjunct professors and tenure-track professors had means of 3.12 and 3.15 respectively. When asked with their level of satisfaction with their college, tenured professors had a mean of 2.91 while adjunct professors and tenure-track professors had means of 3.14 and 3.18 respectively. Tenured professor satisfaction scores differed significantly from both adjunct and tenure-track professors. The difference in scores between adjuncts and tenure-track instructors was not significant.

The data paint an interesting picture of adjunct faculty in comparison to their full-time colleagues. It appears that many of our adjunct respondents are fairly satisfied with their positions. Indeed, other data collected in our survey support this claim and leads us to conclude that most of our respondents are engaged in contingent work voluntarily. Close to 85 per cent of adjuncts report another source of income. The majority of part-time respondents report a long-term relationship with the school. More than 46 per cent said they had worked at the university 12 semesters or more and another 9.6 per cent said they had worked at the university 10–12 semesters. Table 7 explores the issue of adjunct faculty motivation/goals. Respondents were asked about their preferences in a number of different scenarios. The first asked their level of

| Table 6. Mean overall satisfaction scores          | Adjunct | Tenure-track | Tenured |
|--------------------------------------------------|---------|--------------|---------|
| Satisfaction with ... your department            | 3.29    | 3.47         | 3.21    |
| Satisfaction with ... your college**             | 3.14    | 3.18         | 2.91    |
| Satisfaction with ... administration             | 2.64    | 2.83         | 2.53    |
| Satisfaction with ... the university*            | 3.12    | 3.15         | 2.92    |

ANOVA * = significant at .05 ** = significant at .01 *** = significant at .001.
agreement with the following statement: “I am actively seeking other employment and plan to quit”. More than half (54.8 per cent) of adjuncts “strongly disagree” with the statement and another 19.1 per cent “somewhat disagree”. Thus, the majority of adjuncts did not plan to leave their positions. When asked in the next question if they “prefer to teach semester to semester on a class-contingent basis”, more than half said that this was not their preference. However, when asked to assess a third statement, results were different. Adjuncts were asked their level of agreement with the statement “I prefer a non-tenure track, primarily teaching (no research or service requirements) position with multi-year contract and benefits”. The data show that nearly all adjuncts prefer the hypothetical scenario where they have some consistency and benefits annually. For example, 62.6 per cent “strongly agree” with the statement while another 22.6 per cent “somewhat agree”. Table 8 compares the mean university satisfaction scores of people with different responses to the above statements. There were statistically significant differences in satisfaction levels among groups of respondents. Faculty members who said they were actively seeking other employment were more likely to be dissatisfied. Those who were not seeking other employment were more likely to report high levels of satisfaction. Similarly, faculty members who reported preferring the current adjunct arrangement had, on average, higher satisfaction scores than those who did not like the current arrangement. For the last question, there was no statistical significance. As stated earlier, there was not much variation in responses: nearly everyone preferred more certainty in their adjunct assignment.

These data paint a picture of the adjuncts that responded to the survey. These respondents plan to remain in their adjunct position and are not looking for other employment. They do not particularly like the current arrangement that provides little certainty semester-to-semester. If given the option, they would overwhelmingly support a system of multi-year contracts with benefits. Taken together, this suggests a group of respondents that may disproportionately

Table 7. Adjunct motivation

|                                               | Strongly agree (%) | Somewhat agree (%) | Somewhat disagree (%) | Strongly disagree (%) | Total (%) |
|-----------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|----------|
| I am actively seeking other employment and plan to quit | 16 (8.5)           | 33 (17.6)          | 36 (19.1)            | 103 (54.8)           | 188 (100) |
| I prefer to teach semester to semester on a class-contingent basis | 36 (18.8)           | 47 (24.5)           | 38 (19.8)            | 71 (37.0)           | 192 (100) |
| I prefer a non-tenure track, primarily teaching (no research or service requirements) position with multi-year contract and benefits | 119 (62.6)          | 43 (22.6)           | 15 (7.9)             | 13 (6.8)            | 190 (100) |

Table 8. Mean overall satisfaction with the university by employment goals of adjunct

|                                               | Strongly agree | Somewhat agree | Somewhat disagree | Strongly disagree |
|-----------------------------------------------|----------------|----------------|-------------------|------------------|
| I am actively seeking other employment and plan to quit*** | 2.25           | 2.69           | 2.94              | 3.44             |
| I prefer to teach semester to semester on a class-contingent basis*** | 3.63           | 3.23           | 3.15              | 2.75             |
| I prefer a non-tenure track, primarily teaching (no research or service requirements) position with multi-year contract and benefits | 3.10           | 3.23           | 2.67              | 2.92             |

ANOVA * = significant at .05 ** = significant at .01 *** = significant at .00.
represent adjuncts who lack interest in a tenure-line position. Other research supports our conclusion that some adjunct faculty have no interest in a tenure track position. In a pilot study of contingent faculty in technical and professional communication, Meloncon et al. (2016) found that 50 per cent of respondents said they would prefer to be on tenure track while another 24 per cent said they would want to be on tenure track under the right conditions. Only 26 per cent of respondents said they would NOT want a tenure-track position. An earlier report released by the Coalition on the Academic Workforce in 2012 shows similar results. When asked about their interest in accepting a full-time tenure-track position, 51.9 per cent said “yes, definitely interested” and another 21.8 per cent said, “probably interested”. Nearly twenty percent, however, said they were “probably not interested” or “definitely not interested” (CAW, 2012)

4. Discussion
This study had three aims. The first aim was to take seriously the changing nature of the academic workforce by including part-time faculty in the data on faculty satisfaction. Second, it sought to analyse adjunct faculty not just in isolation, but in conjunction with other members of the professoriate. This analysis shows that data excluding part-time faculty is necessarily incomplete. We cannot merely extrapolate findings from full-time professors and apply it to adjuncts. For example, much of the literature on faculty (i.e. tenured and tenure-track) suggests lower rank in academia is associated with less satisfaction. Had we extrapolated from these studies, we would conclude that adjuncts should be the least satisfied of any group. However, this paper shows that this is not always the case. Indeed, how adjunct professors compare to tenured and tenure-track professors will vary depending on the dimension being explored.

A corollary to this finding is the fact that tenured professors consistently reported lower satisfaction than tenure-track faculty. We believe this is an interesting finding that needs to be explored. There are many possible explanations for this. One may be methodological. Tenured professors responded at a higher rate to the survey than tenure-track faculty. Thus, it may be that tenure-track people who did not respond to the survey were proportionally less happy (see Limitations and Future Research below for more on this). Alternatively, tenure-track faculty may have different expectations than tenured faculty. Their reality comes closer to their hopes and therefore they are more satisfied. Tenured faculty may have completely different hopes and their reality may fall short. This could also be a cohort effect or the result of maturation within a career. There are other possible explanations as well. Discovering which among these possible explanations is correct lies beyond the scope of this paper (and the data on which it is based). More research is needed.

The third aim of this paper was to see if adjunct faculty look more like independent gig workers or contingent gig workers. Recall, that contingent gig workers are similar to traditional workers in that they are not their own boss and are instead regular employees without the benefits regular employees receive. Independent gig workers are their own boss and report more freedom, autonomy, and work satisfaction than regular employees (McFeely & Pendell, 2018). The overall picture that emerges is one in which adjunct respondents look more like independent gig workers. While adjunct faculty were less satisfied with hygiene factors related to their jobs (i.e. compensation), they did not consistently report lower levels of satisfaction with motivator factors (recognition, growth/advancement). In some cases, their levels of satisfaction were similar to tenured and tenure-track professors. These data are in line with the small group of studies looking at contingent faculty directly (Antony & Hayden, 2011; Eagan et al., 2015; Feldman & Turnley, 2004; Hoyt et al., 2008; Meloncon et al., 2016). Research shows that how someone assesses a job is not only affected by the characteristics of the job itself but also by her/his expectations and goals. For example, in a study conducted by Feldman and Turnley (2004), the authors find that an individual’s “motivation for accepting contingent employment are important determinants of their reactions to these kinds of jobs”. People who accepted a contingent position reluctantly (e.g., because it was the best option they could find), were less likely to feel satisfied than people who accepted
a contingent position voluntary (e.g., to achieve family/work balance) (Eagan et al., 2015; Ellingson et al., 1998; Feldman & Turnley, 2004).

We conclude that at least some portion of adjunct faculty engage in contingent work voluntarily and are best categorized as independent gig workers. However, we stop short of arguing that ALL or even the majority of adjunct faculty should be categorized this way.

5. Limitations and future research
There were several limitations of our research. First, our sample is not necessarily representative of all faculty throughout the United States. Data were only collected at one institution. While we believe comparing faculty at different ranks and from different disciplines is necessary, we understand that this study provides only a small piece of the puzzle. More research needs to be done, particularly with the use of nationally representative data.

A second limitation relates to the use of secondary data. As with all other kinds of data, however, there are some pitfalls. Most notable among them is the fact that secondary data may not measure all “the constructs that the researchers is interested in” (Ellram & Tate, 2016). For this study specifically, we were unable to measure that extent to which part-time faculty were actually interested in a tenure-track job. The question was simply not asked. However, this is important in understanding the motivations of these workers. One could imagine a situation where someone who had no interest in a tenure-line would be significantly happier with their part-time job than those that aspired to a tenured faculty position. More research needs to be done with this particular issue in mind.

A third limitation of our research is the low response rate from adjuncts as compared to full-time faculty. Recall from earlier that only 26 per cent of adjunct faculty members responded to survey request. This was true despite numerous reminders to respond. Contrast this to the 54.4 per cent of full-time faculty that responded to the survey request. Low response rates are nothing new. Members of the scientific community have noted that many cross-sectional studies have encountered increasing issues with nonresponse (Brick & Williams, 2013; Groves, 2006). For example, Brick and Williams (2013) looked at trends in non-response in four household surveys from 1996–2007. They found that non-response rates increased for all four (4) surveys over the decade. The same study looked at the reasons for nonresponse and noted that refusal on part of the survey respondents was by far the “largest share of nonresponse” (Brick & Williams, 2013). A National Research Council report (2013) on nonresponse in social science surveys points out that declining response rates are not just occurring in the US but in all wealthy countries. Furthermore, studies have shown that nonresponse varies by demographic characteristics (Rindfuss et al., 2015).

This is relevant to this study not because of non-response overall, but because of the difference in response rates between full-time and part-time faculty. Experiments looking at nonresponse have shown that interest in survey topic alone may not trigger participation (Groves et al., 2006). Rather, participation is more likely if thinking about the topic is “rewarding to the respondent”. “When the topic of the survey is relevant to the sample person but generates negative thoughts, unpleasant memories, or reminders of embarrassing personal failings, then the topic may suppress participation despite its personal relevance” (Groves et al., 2006, p. 734). This is potentially salient to our study since factors related to nonresponse may also be related to job satisfaction. Based on the literature, faculty who engage in contingent work involuntarily (contingent gig workers) are less likely to be satisfied with their job. This group also may be less likely to respond to a survey relating their job. Thus, we suspect that part-time faculty who did not respond to the survey are less likely to possess positive opinions about their current position. This is purely speculative and requires further research.

Despite these limitations, the study has added to the literature on faculty satisfaction by taking seriously the changing nature of academia. Adjunct faculty make up the majority of the academic
workforce. Understanding their satisfaction levels is an important factor in understanding the professoriate as a whole.

Funding
The authors received no direct funding for this research.

Author details
Gesemia Nelson  
E-mail: gnelso116@msudenver.edu  
Melissa J. Monson  
E-mail: monson@msudenver.edu  
Karam Adibifar  
E-mail: kadalibfa@msudenver.edu  

1 Department of Sociology and Anthropology, Metropolitan State University of Denver, Denver, CO, USA.

Data availability statement
The data supporting the findings of this study are available from the corresponding author, [GN], upon reasonable request.

Ethics declaration
This research study uses secondary data. The data were collected by a different group from the authors of this study. The authors of this study did not interact with any respondents. The data were distributed anonymously and contain no personally identifiable information. As such, this research study does not meet the criteria for human subjects research.

Citation information
Cite this article as: The gig economy comes to academia: Job satisfaction among adjunct faculty. Gesemia Nelson, Melissa J. Monson & Karam Adibifar,Cogent Education (2020), 7: 1786338.

References
Absher, B. M. (2009). Attraction and retention of females and minorities in Christian higher education. Journal of Research on Christian Education, 18(2), 160–189. https://doi.org/10.1080/10656210903046416
American Association of University Professors (AAUP). (2018). Background facts on contingent faculty positions. https://www.aaup.org/issues/contingency/background-facts
Antony, J. S., & Hayden, R. A. (2011). Job satisfaction of American part-time college faculty: Results from a national study a decade later. Community College Journal of Research and Practice, 35(9), 689–709. https://doi.org/10.1007/s1066820801949513
Arnold, A. E., Coffeng, J. K., Boot, C. R. L., Van Der Beek, A. J., Van Tulder, M. W., Van Dongen, J. M., & Nieboer, D. (2016). The relationship between job satisfaction and productivity-related costs: A longitudinal analysis. Journal of Occupational and Environmental Medicine, 58(9), 874–879. https://doi.org/10.1097/JOM.0000000000000831
Barnes, K. Y., & Mertz, E. (2018). Law school climates: Job satisfaction among tenured US law professors. Law & Social Inquiry, 43(2), 441–467. https://doi.org/10.1111/lsi.12350
Bassett-Jones, N., & Lloyd, G. C. (2005). Does herzberg's motivation theory have staying power? Journal of Management Development, 24(10), 929–943. https://doi.org/10.1108/02621710510627064
Bernat, F. P., & Holschuh, C. S. (2013). Senior female faculty in criminal justice and criminology: Professors and associate professors navigating pathways to success. Women & Criminal Justice, 25(1–2), 11–32. https://doi.org/10.1080/08974454.2013.1025028
Bini, M., & Masserini, L. (2016). Students’ satisfaction and teaching efficiency of university offer. Social Indicators Research, 129(2), 847–862. https://doi.org/10.1007/s11205-015-1161-0
Böckerman, P., & Ilmakunnas, P. (2012). The job satisfaction-productivity nexus: A study using matched survey and register data. Industrial & Labor Relations Review, 65(2), 244–262. https://doi.org/10.1177/001979391206500203
Bozeman, B., & Gaughan, M. (2011). Job satisfaction among university faculty: Individual, work, and institutional departments. The Journal of Higher Education, 82(2), 154–186. https://doi.org/10.1353/jhe.2011.0011
Brick, J. M., & Williams, D. (2013). Explaining rising non-response rates in cross-sectional surveys. Annals of the American Academy of Political and Social Science, 645(1), 36–59. https://doi.org/10.1177/0002716212456834
Carnevale Classification of Institutions of Higher Education. (2020). Center for postsecondary research. Indiana University School of Education. https://cameqcclassifications.iu.edu/lookup/lookup.php
Carson, K. D., Lanier, P. A., & Carson, P. P. (2001). A glimpse inside the ivory tower: A cross-occupational comparison of work orientations in academia. International Journal of Public Administration, 24(5), 479–498. https://doi.org/10.1081/10819214620002716212456834
Chronicle of Higher Education. (2017). United States by the numbers. https://www.chronicle.com/article/United-States-By-the-Numbers/240889
Clemes, M. D., Gan, C. E. C., & Kao, T. (2008). University student satisfaction: An empirical analysis. Journal of Marketing for Higher Education, 17(2), 292–325. https://doi.org/10.1080/08841240801912831
Clifton, L., & McKillup, S. C. (2016). Why such success? Nursing students show consistently high satisfaction with bioscience courses at a regional university. Australian Journal of Advanced Nursing, 33(3), 21–28.
Coalition on the Academic Workforce (CAW). (2012). A portrait of part-time faculty members: A summary of findings on part-time faculty respondents to the coalition on the academic workforce survey of contingent faculty members and instructors. Retrieved from http://www.academicworkforce.org/CAW_portrait_2012.pdf
Cranny, C. J., Smith, C. P., & Stone, E. F. (1992). Job Satisfaction: How People Feel about Their Jobs and How It Affects Their Performance. San Francisco: New Lexington Press.
Dancy, K., & Laitinen, A. (2015). Visualizing the higher education industry. New America. https://www.newamerica.org/education-policy/edcentral/the-higher-education-industry/
Eagon, M. K., Jaeger, A. J., & Grantham, A. (2015). Supporting the academic majority: Policies and practices related to part-time faculty’s job satisfaction. The Higher Journal of Higher Education, 86(3), 448–483. https://doi.org/10.1080/02221546.2015.11777371
Ellingson, J. E., Grywalski, M. L., & Sackett, P. R. (1998). Factors related to the satisfaction and performance of temporary employees. Journal of Applied Psychology, 83 (6), 913–921. https://doi.org/10.1037/0021-9010.83.6.913
Elfram, L. M., & Tate, W. L. (2016). The use of secondary data in purchasing and supply management (PSSM) research. Journal of Purchasing and Supply
Management, 22(4), 250–254. https://doi.org/10.1016/j.pursup.2016.08.005
Ensour, W., Zeglat, D., & Shrafat, F. (2018). Impact of job satisfaction on training motivation. Problems and Perspectives in Management, 16(3), 337–355. https://doi.org/10.21513/ppm.16(3).2018.27
Fassoulis, K., & Alexopoulos, N. (2015). The workplace as a factor of job satisfaction and productivity: A case study of administrative personnel at the university of Athens. Journal of Facilities Management, 13(4), 332–349. https://doi.org/10.1108/JFM-06-2014-0018
Feldman, D. C., & Turnley, W. H. (2004). Contingent employment in academic careers: Relative deprivation among adjunct faculty. Journal of Vocational Behavior, 64(2), 284–307. https://doi.org/10.1016/j.jvb.2002.11.003
Gazzoli, G., Hancer, M., & Park, Y. (2010). The role and effect of job satisfaction and empowerment on customers’ perception of service quality: A study in the restaurant industry. Journal of Hospitality & Tourism Research, 34(1), 56–77. https://doi.org/10.1177/1096348009344235
Gleim, M. R., Johnson, C. M., & Lawson, S. J. (2019). Shoppers and sellers: A multi-group examination of gig economy workers’ perceptions. Journal of Business Research, 98, 142–152. https://doi.org/10.1016/j.jbusres.2019.01.041
Groves, R. (2006). Nonresponse rates and nonresponse bias in household surveys. The Public Opinion Quarterly, 70(2), 646–675. https://doi.org/10.1093/poq/nfl033
Groves, R., Couper, M., Presser, S., Singer, E., Tourangeau, R., Acosta, G. P., & Nelson, L. (2006). Experiments in producing nonresponse bias. The Public Opinion Quarterly, 70(5), 720–736. https://doi.org/10.1093/poq/nfl036
Hagedorn, L. S. (1994). Retirement proximity’s role in the prediction of satisfaction in academe. Research in Higher Education, 35(6), 711–728. https://doi.org/10.1007/BF02497083
Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. New Directions for Institutional Research, 2000(105), 5–20. https://doi.org/10.1002/nir.10501
Hayes, B., Douglas, C., & Bonner, A. (2015). Work environment, job satisfaction, stress and burnout among haemodialysis nurses. Journal of Nursing Management, 23(5), 588–598. https://doi.org/10.1111/jonm.12184
Herzberg, F. (1959). The motivation to work (2nd ed.). Wiley.
Herzberg, F. (1968). One more time: How do you motivate employees? Harvard Business Review, 46(1), 53–62.
Herzberg, F. (2002). One more time: How do you motivate employees? 1968. Harvard Business Review, 81(1), 87.
Hesli, V., & Lee, J. M. (2013). Job satisfaction in academe: Why are some faculty members happier than others? PS, Political Science & Politics, 46(2), 339–354. https://doi.org/10.1016/S1049-0956(13)00004-8
Hoppock, R. (1935). Job satisfaction. Harper publisher.
Hoyt, J. E., Howell, S. L., Glines, L. J., Johnson, C., Spockman, J. S., Thompson, C., & Rudd, C. (2008). Assessing part-time faculty job satisfaction in continuing higher education: Implications for the profession. The Journal of Continuing Higher Education, 56(1), 27–38. https://doi.org/10.1080/07371366.2008.10400139
Hsieh, J. Y. (2016). Spurious or true? An exploration of antecedents and simultaneity of job performance and job satisfaction across the sectors. Public Personnel Management, 45(1), 90–118. https://doi.org/10.1177/0091026016624714
Humpter, S. (2016). What workers want: Job satisfaction in the U.S. management. Research and Practice, 8(1), 39–45.
Ioannou, P., Katsikovil, V., Galanis, P., Velonakis, E., Papadatou, D., & Sourzi, P. (2015). Impact of job satisfaction on greek nurses’ health-related quality of life. Safety and Health at Work, 4(4), 324–328. https://doi.org/10.1016/j.shaw.2015.07.010
Kalberg, L. A. (1997). Work values and job reward: A theory of job satisfaction. American Sociological Review, 42(1), 124–143. https://doi.org/10.2307/2117735
Kass, S. J., Vodanovich, S. J., & Collander, A. (2001). State-trait boredom: Relationship to absenteeism, tenure, and job satisfaction. Journal of Business and Psychology, 16(2), 317–327. https://doi.org/10.1023/A:10111121503118
Krishnan, R., Loon, K. W., & Tan, N. Z. (2018). The Effects of job satisfaction and work-life balance on employee task performance. International Journal of Academic Research in Business and Social Sciences, 8(3), 652–663. https://doi.org/10.6007/IJARRBS/2018/1/3956
Kuhn, K. M. (2016). The rise of the ‘gig economy’ and implications for understanding work and workers. Industrial and Organizational Psychology, 9(1), 157. https://doi.org/10.1017/iop.2015.129
Kwok, R. (2017). Flexible working: Science in the gig economy. Nature, 550(7676), 419–421. https://doi.org/10.1038/nj7676-419a
Lane, K. A., Esser, J., Holte, B., & McCusker, M. A. (2010). A study of nurse faculty job satisfaction in community colleges in florida. Teaching and Learning in Nursing, 5(1), 16–26. https://doi.org/10.1016/j.teln.2009.05.001
Lee, H., Lee, C., Lee, S., Song, H., & Bernhard, B. J. (2013). The impact of CSR on casino employees’ organizational trust, job satisfaction, and customer orientation: An empirical examination of responsible gambling strategies. International Journal of Hospitality Management, 33, 406–415. https://doi.org/10.1016/j.ijhm.2012.10.011
Marston, S. H., & Brunetti, G. J. (2009). Job satisfaction of experienced professors at a liberal arts college. Education, 130(2), 323.
McCoy, S. K., Newell, E. E., Gardner, S. K., Newell, E. E., Gardner, S. K., & Gardner, S. K. (2013). Seeking Balance: The Importance of Environmental Conditions in Men and Women Faculty’s Well-being. Innovative Higher Education, 38(4), 309–322. https://doi.org/10.1007/s10755-012-9242-z
McFeely, S., & Pendell, R. (2018). What workplace leaders can learn from the real gig economy. Gallup. https://www.gallup.com/workplace/240929/workplace-leaders-learn-real-gig-economy.aspx
Melkonian, L., England, P., & Ilyasova, A. (2016). A portrait of non-tenure track faculty in technical and professional communication: Results of a pilot study. Journal of Technical Writing and Communication, 46(2), 206–235. https://doi.org/10.1177/0044845515633601
Narinsoda, A., & Schieman, S. (2016). Underpaid but satisfied: The protective functions of security. Work and Occupations, 43(2), 215–255. https://doi.org/10.1177/0730888415625332
National Center for Education Statistics (NCES). (2018) https://nces.ed.gov/fastfacts/display.asp?id=372
National Center for Higher Education Management Systems (NCHEMS). (2015). Percent of 18 to 24 year olds enrolled in college. http://www.higheredinfo.org/
Nelson et al., Cogent Education (2020), 7: 1786338
https://doi.org/10.1080/2331186X.2020.1786338

Netherlands, T. & National Center for Educational Statistics. (1993). 120 years of american education: A statistical portrait. https://nces.ed.gov/pubs93/93442.pdf

Victorino, C., Nylund-Gibson, K., & Conley, S. (2018). Prosocial behavior in the professoriate. International Journal of Educational Management, 32(5), 783–798. https://doi.org/10.1108/IJEM-09-2017-0258

Wang, Y., & Liesveld, J. (2015). Exploring job satisfaction of nursing faculty: Theoretical approaches. Journal of Professional Nursing, 31(6), 482–492. https://doi.org/10.1016/j.profnurs.2015.04.010

Watson, R., Storey, D., Wayneezyck, P., Keesey, K., & Short, H. (1996). The relationship between job satisfaction and managerial remuneration in small and medium-sized enterprises: An empirical test of comparisons income and equity theory hypotheses. Applied Economic, 28(5), 567–576. https://doi.org/10.1080/00207549600000036

Webber, K. L., & Rogers, S. M. (2018). Gender differences in faculty member job satisfaction: Equity forestalled? Research in Higher Education, 59(8), 1105–1132. https://doi.org/10.1007/s11162-018-9494-2

Yin, H., Wang, W., & Han, J. (2016). Chinese undergraduates’ perceptions of teaching quality and the effects on approaches to studying and course satisfaction. Higher Education, 71(1), 39–57. https://doi.org/10.1007/s10734-015-9887-5

Zábradská, K., Mudrák, J., Květoň, P., Blažej, M., Machovcová, K., & Šolcová, I. (2014). Work environment and well-being of academic faculty in czech universities: A pilot study. Studio Paedagogica, 19(4), 121–144. https://doi.org/10.5817/SP2014-4-6
