Center for
Effective
Organizations

Talent Management of Nonstandard Employees

CEO Publication
G15-19 (666)

Wayne F. Cascio
The Business School
University of Colorado Denver

John Boudreau
Research Scientist
Center for Effective Organizations
Marshall School of Business
University of Southern California

December 2015

Chapter 28, Oxford Handbook of Talent Management

Talent Management of Nonstandard Employees[1]

Chapter 28, Oxford Handbook of Talent Management

Wayne F. Cascio
The Business School
University of Colorado Denver
1475 Lawrence Street
Denver, CO 80201
Phone: (303) 315-8434
Fax: (303) 315-8084
Email: wayne.cascio@ucdenver.edu

John W. Boudreau
Center for Effective Organizations
University of Southern California
1149 South Hill Street, Suite 950
Los Angeles, CA 90015
Phone: 213-740-9814
Email: john.boudreau@usc.edu

[1] Special thanks to Nora O. Hilton, of the Center for Effective Organizations, for her assistance and support in preparing the literature review and analysis.

More and more workers are operating outside the traditional confines of regular, full-time employment. They may be "free agents" or "e-lancers" (that is, freelancers in the digital world) who work for themselves, or they may be employees of an organization a firm is allied with, employees of an outsourcing or temporary-help firm, or even volunteers. Last year, almost 18 million people toiled as nonstandard workers for 15 hours or more a week (Bensinger, 2015). Software maker Intuit estimates that 40 percent of the American workforce will be nonstandard workers by 2020 (Sveen, 2015). It's already happening now in a number of industries. For example, 90 percent of the hands-on crew in an offshore oil-exploration project work for contractors (Barrett & Elgin, 2015). On any given day, experts estimate, as much as 24 percent of the American workforce may be nonstandard workers (Pofeldt, 2015), and this number excludes the 16.2 percent whom the U.S. Government Accountability Office categorizes as "standard part-time workers".

Nonstandard workers are appearing in an increasingly broad range of work. It's not just low-level clerical tasks, but also managerial and professional work. . You can find LinkedIn freelance profiles for Directors of Marketing Communications and freelance CEO, CFO, and COO jobs on Indeed.com. Nonstandard workers may be less costly than their regular full-time counterparts, especially since they typically are not eligible for benefits. Nonstandard work allows the workforce to expand or contract faster when demand is volatile (Davis-Blake & Uzzi, 1993). Nonstandard work allows organizations to tailor the skill sets they need without hiring and firing full-time employees.

Two factors combine to make nonstandard work more feasible for organizations and workers. The first is technology. Internet-based communication tools, including collaborative workspaces and the opportunity for remote monitoring by companies, makes nonstandard work attractive to individuals as well as organizations (Cascio & Montealegre, in press). Second, creativity and problem-solving skills play critically important roles in production and value creation in today's knowledge-based economy, and those can originate either inside outside organizational boundaries. For certain specialized skills, the best way to obtain and keep them current is a freelance or nonstandard work ecosystem (Boudreau, Jesuthasan & Creelman, 2015; Meyer, Somaya & Williamson, 2012).

These factors have combined to create a virtuous circle. That is, the more nonstandard work exists as a model of how to do work and to conduct a career over a lifetime, the more legitimate it becomes as a work form and life pattern. The more legitimate it becomes, the more firms and employees will choose to engage in it (Ashford, George, and Blatt, 2007; Boudreau et al., 2015).

At the same time, there are risks associated with nonstandard workers. Will they be as committed as full-timers? Will their rapid turnover require extensive orientation and training of new ones? Will they stick around long enough to develop the kind of depth of understanding of people and operations that will enable them to contribute meaningfully? Can work arrangements appropriately protect workers and balance worker and organizational rights and needs?

Ashford et al. (2007) correctly noted that nonstandard work is a topic worthy of studying on its own, and it is also an ideal context for testing and developing theory

about organizations, work, and workers. What is the pattern of research on nonstandard work, and its implications? This chapter offers a review of research on nonstandard work through the lens of the talent-management lifecycle. We set out to map existing research, to discover where research has been plentiful and sparse, and whether research frameworks applied to nonstandard work are similar to those applied to traditional, regular full-time employment, and the implications for future research.

Five sections comprise the chapter. We begin by defining nonstandard workers, and explaining the various categories that make up this segment of the workforce. Section two addresses why and when organizations choose to use nonstandard workers, as illustrated by the decisions of several well-known companies to use them. Section three describes the stages and the objectives of the talent lifecycle. Section four maps the talent-lifecycle stages and objectives against several categories of nonstandard work, and the distribution of research attention across that map. Analyzing that distribution reveals large areas of very sparse research, as well as two significant clusters of research. One focuses on more traditional arrangements (contractors, temporary and outsourced work), and the other focuses on less traditional arrangements (freelance platforms and crowdsourcing). The next section delves more deeply into these two clusters, revealing striking differences in their respective research questions, theoretical frameworks, and disciplinary foundations. Our final section offers questions and opportunities for future research, to deepen our understanding of this growing phenomenon.

Definition and Types of Nonstandard Workers

Ashford et al. (2007) defined nonstandard workers are "something other" than standard workers, those who work on a fixed schedule, at the employer's place of business, under the employer's control, and with mutual expectations of continued employment. Ashford et al. (2007) excluded part-time workers because some expect employment continuity, while others do not. In this chapter, we include part-timers, and we note when research identified those with expectations of continuous employment.

Pfeffer and Baron (1988) described three dimensions of attachment between workers and organizations: The degree of physical proximity between employer and employee; the extent of administrative control that the employer exerts; and the expected duration of employment. Table 1 shows these three types of attachment, and various categories of nonstandard work that describe each one.

Table 1

Three Types of Attachment and Types of Nonstandard Work That Describe Each One

Dimension	**Temporal Attachment**	**Administrative Attachment**	**Physical Attachment**
Definition	Extent to which workers expect employment to last over the long term	Extent to which workers are under the organization's administrative control	Extent to which workers are physically proximate to the organization
Examples	Temporary workers, PEOs, volunteers Borrow, loan	Contract workers Outsourcers Virtual workers Talent platform Crowdsource	Teleworkers Part-time* Flextime

*Assumes part-time workers are part of a secondary labor market, work limited hours, and have no expectations of long-term employment.

In Table 1 above, PEOs refers to professional employer associations. A PEO enables an organization to outsource the management of human resources, employee benefits, payroll, and workers' compensation. That is, both the PEO and client company have an employment relationship with the worker. They share and allocate responsibilities and liabilities for compliance with employment laws (National Association of Professional Employer Associations, 2015).

Why Organizations Choose Nonstandard Workers

Should you "build" or "buy" the capabilities your organization needs to get work done? What about borrowing employees from another organization or soliciting volunteers? When should you use each alternative? Leaders who choose to "build" hire full-time employees, often for strategically important jobs. Then they offer them lots of opportunities for development, formal as well as informal, on the job, to develop the kinds of knowledge, skills, abilities, and other characteristics that their organizations need to get work done. Their time horizon is fairly long, and it assumes that these employees will remain with the organization, typically for 3-5 years. Leaders do this for two key reasons: to ensure that high-value talent is readily available, and to protect that talent from competitors. Other ways to get work done, especially when it needs to be done in a shorter time frame, include borrowing workers, seeking volunteers, or hiring contract workers who already have the kinds of capabilities the organization needs.

Theory can help guide these decisions. Traditionally, work was performed inside the boundaries of an organization. Those boundaries may be horizontal (defined by the scope of products and markets), or vertical (defined by the scope of activities undertaken

in the industry value chain) (Santos & Eisenhardt, 2005). The same authors identified four distinct conceptions of boundaries: efficiency, power, competence, and identity. Each deals with a fundamental organizational issue - cost (efficiency), autonomy (power), growth (competence), and coherence (identity). As work flows across more permeable boundaries, it has implications for each of these issues.

The most dominant conception of organizational boundaries is cost (efficiency), whether a transaction (e.g., a task or project) should be conducted inside the organization or outside through a market exchange. Transaction-cost economics (Coase, 1993) argues that boundaries should be set at the point that minimizes the cost of governing activities. However, in the contexts of bounded rationality and exchange uncertainty, the precise terms of transactions are costly to define, monitor, and enforce, leading to incomplete contracts.

Alternatively, the competence conception of boundaries views the organization as a unique bundle of resources, and asks what resources the organization should possess. In less dynamic environments, organizations tend to become configurations of deeply entwined resources, such as in "lean manufacturing" (Prahalad & Hamel, 1990). In moderately dynamic environments, resources are often more loosely coupled. For example, a study of U.S. medical firms (Karim & Mitchell, 2000) revealed that managers use acquisitions to alter horizontal boundaries. Finally, in high-velocity environments, characterized by ambiguity, non-linear turbulence, and fast pace, the underlying strategic logic shifts further from leveraging existing resources to seizing opportunities using novel combinations of new and existing resources. As noted by the CEO of Philips, "We used to start by identifying our core competencies and then looking for market

opportunities. Now we ask what is required to capture an opportunity, and then either try to get those skills via alliances or develop them internally to fit" ((“Struggling with a supertanker”, 2002).

As the environment becomes increasingly volatile and uncertain (“high-velocity), alternatives beyond alliances have emerged, such as outsourcing, crowdsourcing, using independent contractors or talent platforms, professional employer organizations, even borrowing employees from another firm (Boudreau, et al., 2015). These go well beyond simple “build or buy” decisions that have typically been the focus of theory and research. Consider the business model that Apple (and, more recently, Google) has forged with application developers. Hundreds of thousands of applications exist for the iPhone, iPad, and Android operating systems. The developers of those “apps” do not work for Apple, nor Google, nor a phone manufacturer. In another example, Apple partnered with Visa to develop the ApplePay payment system (Boudreau, et al., 2015). The partnership required that Visa and Apple combine their respective engineers into a project team, and that they share detailed proprietary elements of each other’s products and systems, because that was necessary for the team to have the necessary insights to create the combined ApplePay system. Apple developed a similar partnership with IBM, combining Apple’s capability in product design with IBM’s expertise and relationships for building enterprise systems. Boudreau, et al. (2015) also described how Siemens invented a pediatric hearing aid and forged a partnership with the Walt Disney Corporation through which Disney marketing employees developed the storybooks, character-themed packaging, and displays for physicians’ offices, to help market the hearing aid.

This implies that the discourse must evolve from the optimal way to minimize the costs of transactions to creating and maintaining the optimal resource portfolio for superior profitability and growth.

Decisions to acquire talent outside the traditional boundaries of an organization are typically based on considerations such as cost (efficiency) and opportunities for growth (by increasing competence) to pursue new market opportunities. If an organization does decide to move outside its traditional boundaries to acquire talent, there are numerous alternative channels for doing that, such as outsourcing, crowdsourcing, independent contractors, talent platforms, borrowing employees from other organizations, or even seeking volunteers. Such decisions have potentially significant implications for every element of talent management, such as sourcing, rewarding, developing and engaging workers. So, we next define the talent lifecycle and its objectives, as one foundation for mapping and interpreting research.

The Talent Lifecycle

The effects of nonstandard work on the HR discipline and HR functions is complex, so it's helpful to frame it within a familiar metaphor; the "talent lifecycle." The talent lifecycle describes HR processes as a series of employment life stages, beginning when a person enters an organization, capturing his or her experiences as he or she encounters its rewards and development opportunities, and finally the lifecycle ends when the person separates from the organization. Figure 1 depicts the talent lifecycle graphically.

Figure 1. Talent Lifecycle and Objectives

Adapted from Boudreau, J.W., Jesuthasan, R. and Creelman, D. *Lead the Work, 2015. Hoboken, NJ: Wiley..*

Typical names of the stages of the talent lifecycle are shown in the outer circle. The cycle starts with "planning", through which an organization estimates the current and future supply of workers and demands for work. It develops strategies and tactics to match projected demand to projected supply. "Attracting and sourcing" identifies the sources from which workers are drawn, and the activities to attract workers to engage with the work. "Selecting" involves choices and decisions regarding which of the willing workers will be matched with specific work to be done. "Deploying" moves workers among different work experiences, locations, and assignments over time. "Developing" builds the capacity of workers through experiences, such as training, experiential learning, and challenges. "Rewarding" conveys an array of benefits to workers through

explicit exchange or through implicit experiences via the work itself. Finally, "separating" ends a relationship between a worker and a particular work assignment or experience.

Traditionally, the lifecycle is expressed in terms of entry, movement within, and movement out of a particular organization and it is shown in terms of a series of jobs contained within that organization. It is often called the "employment lifecycle," and it begins when a person joins and ends when a person leaves a particular organization. We have been careful here to avoid referring to a single organization and its jobs. As we shall see, if we use the words "work" and "worker" instead of "organization," "job," or "employee," this familiar model can become a powerful organizing metaphor for a world beyond employment. The idea is that all of these lifecycle stages still occur, but not necessarily within the boundary of a single employer and not necessarily through work experiences organized as jobs.

The middle of the circle includes a set of broad outcomes or objectives of the employment lifecycle. Here, we have included engagement, leadership, diversity, performance, and culture. Engagement refers to employee commitment, loyalty, identity, passion, and satisfaction with their relationship with the organization. Leadership refers to setting a vision and values, inspiring followers, and communicating strategy and mission. Diversity refers to an environment that is inclusive of differences, encourages disparate perspectives, and allows interactions among those with different demographic, lifestyle, professional, and cultural backgrounds. Performance refers to the results produced by individuals and groups, as well as the systems that evaluate, communicate, and track those results. Culture refers to the often-unstated beliefs, norms, values, and

customs of the work. Again, these are traditionally framed to focus on a particular organization, with terms such as "employee engagement," "job performance," "company culture," or "top [name of the company] leadership." Again, we have been careful to frame these ideas in terms of the work and the worker, so that they can encompass not only traditional employment, but also a world beyond traditional employment.

How Does Research on Nonstandard Work Map Against The Talent-Management Lifecycle Activities and Objectives?

Now that we have established the definitions of nonstandard work categories and the talent-lifecycle stages and objectives, it is possible to combine the two frameworks to map the research literature on nonstandard work. Our objective is to identify how comprehensively the intersections have been addressed, and to describe where research attention has been plentiful versus sparse.

Methodology

We undertook a literature search for studies addressing nonstandard work. We included in our search the following nonstandard work arrangements:

- Independent Contractor
- Outsourcing and temporary help agency
- Part-time employment
- Professional Employment Organizations (PEO's)
- Freelance platforms
- Crowdsourcing
- Volunteers
- Borrowing Employees from Another Organization

- Loaning Employees to Another Organization

The ordering of these arrangements is not random. We have attempted to place them in order starting with nonstandard arrangements that have been used for a longer time, and thus are likely better known to organizations and workers, progressing toward arrangements that are newer and perhaps less known to organizations and workers. In addition, the work arrangements of freelance platforms, crowdsourcing, and volunteers (e.g., gamers) are often enabled by cloud-based social technology, a relatively newer development, compared to the more traditional approaches at the top of the list.

We coded each article by the type of nonstandard work it addressed and by the following elements of the talent lifecycle, beginning with the elements in Figure 1 and then expanding them to reflect other significant HR activities found in the literature. This produced the following talent-lifecycle elements:

- Plan
- Attract
- Source
- Select
- Onboard
- Train
- Deploy
- Appraise
- Goal Set
- Develop
- Reward

- Separate
- Rehire

We also coded the articles according to the HR outcomes they addressed, beginning with those in Figure 1, and then expanding them as we discovered the most frequent topics in the literature, to include these outcomes:

- Engagement
- Leadership
- Diversity
- Performance
- Culture
- Compliance
- Cost
- Risk

We completed the literature search between September 1 - September 16, 2015 using the database ABI/INFORM Complete. We included only articles containing certain keywords in the abstract and that were from peer-reviewed, scholarly journals. The keywords included: free-agent, contract work, borrowed employees, freelance work, non-traditional employment, non-employee worker, trades and tours of duty, deconstructed work, talent trades, piecework rewards, labor market intermediaries (LMIs), professional employer organizations (PEOs), temporary work, temporary work agency, temporary help service, outplacement services, creative collaboration, crowdsourcing, open innovation, knowledge sharing, recognition awards, dual-incentive structure, contingent work or labor,

idiosyncratic deals. We refined the resulting literature further to include only those articles that addressed the relationships between non-traditional work arrangements and human resource management practices and outcomes. Our search uncovered 291 articles.

We assigned a number to each article, and we entered its number in the cells of a matrix with HR Lifecycle stages and Objectives as rows and work types as columns. We assigned each article to one or more cells if it addressed any of the Lifecycle and Objective categories.

Results

Table 2 shows the frequency with which we coded articles into each of the cells representing the intersection of a talent lifecycle element or objective in the rows, and a type of nonstandard work in the columns. Note that we counted articles multiple times if the same article addressed multiple lifecycle elements or multiple nonstandard work arrangements.

Table 2. Frequency of articles addressing combinations of nonstandard work and talent lifecycle elements

	Inde-pendent Con-tractor	Outsourcer / temporary agency	Part-Time	PEO	Free-lance Plat-form	Crowd-Source	Volun-teer	Borrow	Loan	**Total**
Talent-Management Lifecycle										
Plan	29	53	17	5	4	3	0	0	0	117
Attract	2	5	2	0	3	4	0	0	0	18
Source	6	15	2	2	8	9	0	0	0	45
Select	9	16	5	0	4	4	0	0	0	44
Onboard	1	2	1	0	1	1	0	0	0	6
Train	11	27	8	0	0	0	0	0	0	51
Deploy	3	7	1	0	1	1	0	0	0	16
Appraise	4	3	1	1	2	1	0	0	0	14
Goal Set	2	2	1	0	1	2	0	0	0	10
Develop	20	26	8	2	0	0	0	1	2	65

Reward	20	30	15	3	3	3	0	1	2	84
Separate	8	17	9	0	0	0	0	0	0	35
Rehire	1	1	1	0	0	0	0	0	0	3
Talent-Management Objectives										
Engagement	**53**	**101**	33	7	**5**	**7**	0	1	2	209
Leadership	6	11	4	3	2	3	0	1	1	31
Diversity	3	7	4	0	2	0	0	0	0	16
Performance	**11**	**30**	9	2	**4**	**6**	0	1	1	64
Culture	3	9	1	1	1	1	0	0	0	16
Compliance	12	21	4	4	1	1	0	1	1	45
Cost	19	38	7	4	0	0	0	1	1	70
Risk	11	20	2	1	0	0	0	0	0	34
Totals	234	441	135	35	42	46	0	7	10	

Looking at the totals at the bottom of the table, by far the greatest attention to the HR implications of nonstandard work has been devoted to the more traditional nonstandard work arrangements of outsourcing, temporary help agencies and part-time workers. This is followed by moderate levels of attention to PEOs, freelance platforms, and crowdsourced work. Very few studies attend to volunteers, or borrowing and loaning employees between organizations.

Looking at the totals on the right, the most studied element is the engagement objective. Other objectives that appeared frequently were Performance and Cost. Least-addressed talent outcomes were Diversity and Culture. Among the lifecycle activities, Planning is by far the most frequently studied, while Rewarding. Develop, and Train were addressed moderately frequently. Least-addressed HR activities were Onboarding, Rehiring, and Goal Setting.

One conclusion to the pattern of results is that there is ample opportunity to extend research attention to work arrangements outside of contractor and outsource/temporary, and to talent management elements beyond engagement.

Why might there be such a preponderance of research in the first two columns? It may be that research reflects the temporal emergence of nonstandard work arrangements, with the more traditional arrangements on the left being far more frequently addressed. We may see additional research devoted to the work arrangements on the right of the table, as they are used over a longer time, and experience with them reveals data sources and interesting research questions.

Why the preponderance of attention to engagement? As we shall see, much of the engagement-focused research reflects an interest in determining whether nonstandard workers have similar attitudes such as work satisfaction, commitment, and motivation. This research often proceeded from a hypothesis that nonstandard work may be exploitive, and thus produce less positive worker attitudes and responses. This reflects significant social and legal attention to the dangers of worker exploitation, particularly during the mid-to-late 20th century, when many of these arrangements became more widespread. A similar logic may explain the large number of studies that addressed the outcomes of compliance and cost, again largely concentrated in the nonstandard arrangements of independent contractor and outsource/temporary work. Research in these areas also reflected social interest and concern about whether such new arrangements actually reduced labor costs, and how they might create a danger of non-compliance with existing labor legislation, perhaps because they were the first nonstandard arrangements to emerge as alternatives to standard work. For decades, full-time, in-house employment was the presumed way that work was done, and that was reflected in existing legislation, cost estimates, and planning models. Thus, research tended to

apply frameworks developed for standard work, and examine the earliest forms of nonstandard work through the lenses typically used to describe and regulate standard work.

Yet, these same issues of engagement, cost, and compliance are equally as applicable to nonstandard work arrangements that have emerged more recently, including freelance platforms and crowdsourcing. Have they received the same emphasis? Table 2 shows that among the talent-management objectives studied, when it comes to these two nonstandard work arrangements, engagement revealed the highest cell counts. Yet, the Performance row reveals the same amount of research attention as engagement for these two work arrangements. This is in sharp contrast to the work arrangements of independent contractor, outsource/temporary, and part-time, where attention to performance appears far less often than engagement. Moreover, in the columns for freelance platforms and crowdsourcing, the number of references that dealt with compliance and cost are very few or none.

It thus appears from Table 2 that there may be a fundamental difference in the research on the nonstandard work arrangements on the left, which emerged earlier, and those on the right, that emerged more recently. This may also be due, in part, to the disciplinary foundations of the scholars in each area. Scholars studying contractors and outsourced work bring backgrounds in human resources, labor relations, labor economics and industrial psychology, and the citations reflect this. Scholars studying freelance platforms and crowdsourcing bring backgrounds in organizational design, group processes, and operations management. Thus, the unit

of analysis, important conceptual connections, and independent and dependent variables, differ significantly.

Because a comprehensive treatment of all the cells in Table 2 is beyond the scope of this chapter, we decided to conduct an illustrative examination of the cells in Table 2 that were most populated, providing at the same time, clues to the differences in how researchers have addressed the non-standard work arrangements. Specifically, we decided to focus on studies that were coded as relevant to the Engagement and Performance rows of Table 2. One group represents early-emerging, nonstandard work arrangements: Independent Contractor and Outsourcer/Temporary. The contrasting group represents more recent nonstandard work arrangements: Freelance Platform and Crowdsource. Focusing on these cells allowed us to capture the area of the greatest attention (engagement of independent contractors and outsource/temporary workers), and to contrast it with the newer work arrangements, in the areas that have received the most attention. Our next section, describes studies that reveal some important gaps in each type of research, and important lessons that the each category of research can learn from the other.

Comparing Research on Traditional (Contractors and Temporary/Outsourced) versus Less Traditional (Freelance Platforms and Crowdsourced) Nonstandard Work

Our review unearthed fundamental and consistent differences between research that addressed Contractors and Temporary/Outsourced Work versus Freelance Platforms and Crowdsourced Work. We can see this quite vividly when we look at

how research on each category of nonstandard work addressed the outcomes of Engagement and Performance.

Overall, the two categories of research emanate from very different conceptual bases. Research on more traditional forms of nonstandard work (contractors and temporary/outsourced work) focus on cognitive and attitudinal reactions of the workers, often compared to regular full-time workers. In contrast, research on the less traditional forms of nonstandard work (freelance platforms and crowdsourcing) is more often framed in terms of the process steps or the particular outcomes of the process, rather than the cognitive or behavioral experiences, attitudes, or actions of individuals. For example, when incentives for performance are examined with regard to outsourced and contract workers, the theory base often draws on psychological and behavioral theories of rewards. When incentives are examined with regard to freelance and crowdsourced work, the focus is on the differential effect of incentives on the sorts of ideas, comments, and insights produced by the group as a whole. The individual cognitive and behavioral responses to incentives are implicit in research on crowdsourcing and freelance platforms, while such responses are often the main focus in research on outsourced or contractor arrangements. In contrast, research on contractors and outsourced work frequently leaves implicit the question of the work processes and outcomes. Indeed, researchers studying contractors and outsourced work often control for the work processes by ensuring that all the subjects are doing the same tasks, even to the point of having standard workers working in close physical proximity with nonstandard workers. We have illustrated this in Tables 3 and 4, which contrast the

two types of nonstandard work, focusing on those that used employee engagement and/or performance as a dependent variable. Table 3 reveals a variety of theories or research frameworks that have been used to investigate more traditional nonstandard work arrangements, such as independent contractors, outsourcers, and temporary-help agencies, as related to the objectives of engagement or performance. We refer to these types of work arrangements as Category 1. Table 4 shows research frameworks applied to two newer types of nonstandard work arrangements, freelance platforms and crowdsourcing, as related to the objectives of engagement or performance. We refer to these types of work arrangements as Category 2.

Table 3

Representative Theories or Research Frameworks Applied to Independent Contractors, Outsourcers, and Temporary-Help Agencies

Framework	Objective*	Representative Citations
Social-exchange theory	E/P	Ang et al., 2003; Chambel & Sobral, 2011
Career theories	E/P	De Cuyper et al., 2011; Mallon, 1998; Mirvis & Hall, 1994; Peel & Inkson, 2004; Zeitz et al, 2009
Organizational justice (procedural, distributive, interpersonal, informational)	E/P	Ang et al., 2003; Collinson, 1999; Feldman et al., 1994; McAllister, 1998; Rogers & Henson, 1997
Psychological contract	E/P	Chambel & Castanheira, 2006; George, 2003; Guest, 2004; Ho et al., 2003; Lapalme et al., 2011;

		McDonald & Makin, 2000; Millward & Brewerton, 1999
Organizational Citizenship	E	Broschak & Davis-Blake, 2006; Chiu, et al., 2015; Moorman & Harland, 2002; Uzzi & Barsness, 1998; Van Dyne & Ang, 1998; Wheeler & Buckley, 2001
Role theory	E	Broschak & Davis-Blake, 2006; Ho et al., 2003; Krausz et al., 1995; Parker et al., 2002; Sverke et al., 2000
Commitment	E/P	Beard & Edwards, 1995; Boswell et al., 2012; Van Breugel, et al., 2005; Chambel & Castanheira, 2012; Chambel & Sobral, 2011; Clinton, et al., 2011; Ellingson et al., 1998; Feldman, 2006; Felfe et al., 2008; Gallagher & Sverke, 2005; Krausz et al., 1995; Pearce, 1993
Work-family conflict	E/P	Ang & Slaughter, 2001; Gallagher & Parks, 2001
Well-being	E	Bardasi & Francesconi, 2004; Bernhard-Oettel, et al., 2005; Virtanen et al., 2003
Employee voice	E	Davis-Blake et al., 2003
Volition	E/P	de Jong & Schalk, 2010; DiNatale, 2001; Ellingson et al., 1998; Hardy & Walker, 2003; Isaksson & Bellagh, 2002; Polivka & Nardone, 1989
Perceived	E/P	Buch et al., 2010; Liden et al. 2003

organizational support		Chambel & Sobral, 2011
Job design	E/P	Allan & Sienko, 1997; Ang & Slaughter, 2001; Pearce, 1993;
Training	E/P	Chambel & Sobral, 2011; Hanratty, 2000; Lowry et al., 2002
Job satisfaction	E/P	Aletraris, 2010; Bardasi & Francesconi, 2004; Clinton et al., 2011; De Cuyper & De Witte, 2006; Ellingson et al., 1998; Torka & Schyns, 2007; Wilkin, 2013
Social identity theory	E	Chattopadhyay & George, 2001
Theory of majority-minority group relations	E	Broschak & Davis-Blake, 2006
Integration/trust	E/P	Broschak et al., 2008; Chattopadhyay & George, 2001; Davis-Blake et al., 2003; de Gilder, 2003; Lautsch, 2003; Pearce, 1993; Yang, 2012
Knowledge sharing	E/P	Galup et al., 1997; Matusik & Hill, 1998

*E = Engagement; P = Performance

The difference in theories and research frameworks applied to Categories 1 and 2 is quite striking. For example, research on Category 1 nonstandard work arrangements typically focuses on enhancing individual behaviors. For Category 2 nonstandard work arrangements, in contrast, research typically focuses on enhancing collective outcomes.

Table 4

Research Frameworks Applied to Freelance Platforms and Crowdsourcing

Framework	Objective*	Representative Citations
Use of social networks to facilitate virtual collaboration	E/P	Garrigos-Simon et al. (2012)
Effects of technology	E/P	Kane (2014)
Contests to create Incentives	E/P	Morgan & Wang (2010)
Appropriate configurations of HR practices	E/P	Lepak & Snell (2002)
Maximizing payoffs From crowdsourcing	E	Prpic et al. (2015)
Managing crowds to enhance innovation outcomes	E	Malhotra & Majchrzak (2014)
Generating innovative ideas from innovation contests	E	Armisen & Majchrzak (2015)
Expectancy theory to motivate effort	E	Sun et al. (2015)
Psychological contracts and nonstandard workers	E/P	Parks et al., (1998)
Health consequences of contingent work	E	Quinlan et al. (2001)
Training of teleworkers	E/P	Solomon & Templer (1993)

Effects of internet-based technologies on labor markets	P	Freeman, R. B. (2002)
Effects of IT-based supplier relationships	P	McDonald & Kotha (2014)
Organizational learning with freelanced, crowdsourced workers	P	Schlagwein & Bjorn-Andersen (2014)

*E = Engagement; P = Performance

The terms "engagement" and "performance" are common to both Tables 3 and 4,, but they seem to be defined and studied quite differently for each category of nonstandard work arrangements. For example, in Category 1 the focus of the studies was primarily on cognition and attitudes, with performance often mentioned only as a potential outcome. When the focus in Category 1 was "engagement", researchers typically studied cognition, health, and attitudes in depth. In contrast, in Category 2 even when the objective was engagement, researchers did not measure it per se, but rather discussed it as a potential explanation for their main focus - outcomes or process. Conversely, when the objective was "performance" for Category 2 workers, performance was a major focus, with very detailed and tangible measurement that often included nuances, such as whether ideas were creative or integrative. What might account for such stark differences in the research shown in Tables 3 and 4?

Our reading of the literature suggests that this may be because the research on contract and outsourced work emphasizes the issue of whether workers are exploited by such arrangements, relative to more standard employment (regular full-time jobs). For example, Broschak & Davis-Blake (2006) used "data collected

from workers at two U.S. locations of a large, multinational financial services firm. We selected these two locations because both were responsible for similar activities (payment processing, account reconciliation, and inquiry/complaint handling), and local managers regularly utilized nonstandard workers to supplement the standard workforce" (p. 380). The concern with comparing standard workers to nonstandard workers is not prominent among researchers studying crowdsourcing and freelance platforms.

The difference may also reflect the distinct disciplinary foundations of the scholars in each area. The unit of analysis, the important conceptual connections, and independent and dependent variables differ significantly. We can illustrate this by comparing a sample of articles that addressed Engagement as an outcome, from each category of research. (Space constraints do not allow us to include a similar sampling of the outcome, Performance).

Research on Engagement in Freelance Platform and Crowdsourced Work

Malhotra & Majchrzak (2014) provide suggestions for getting innovation contests to generate ideas with greater competitive potential. These include: fostering different crowd roles to ensure a diversity of contributions; offering knowledge-integration instructions and incentives; and offering explicit instructions for sharing different knowledge. They focus mainly on the process of generating ideas, invoking few behavioural theories. Morgan & Wang (2010) cite empirical studies about incentives and the construction of idea tournaments, and they provide decision trees to help leaders decide how to create them. They mention the "theory of network effects" (phones are not valuable until they exist in a network), returns to non-pecuniary incentives such as

reputation, and the concepts of social interactions, secrecy, and arbitrage. Prpic, et al. (2015) focus mainly on the practical issues of creating crowdsource-based contests, and offer some useful frameworks for constructing rewards, participant interactions, sourcing participants, etc. They make some references to Resource-Based theory in discussing how to make crowdsourced information non-replicable, but the frameworks are mostly about the structure of innovation, not behavioural or attitudinal experiences of the workers.

Armisen & Majchrzak (2015) also focus on elements that make innovation contests more effective when an innovative post is made: (1) variety of participant familiarity with the topic; (2) amount of collaboration versus argumentation in the discussion; and (3) whether the poster had previous posts in that discussion before his or her innovative one. Sun, Wang, Yin, and Zhang (2015) is the only article in this cell that actually invokes a behavioural theory. The article uses expectancy theory to examine the effects of reward valence, trust, and self-efficacy, including a non-linear relationship between self-efficacy and effort and the moderating role of task complexity. The results show that: "(1) reward valence and trust positively influence effort; and (2) when task complexity is high (low), there will be a convex (concave) relationship between self-efficacy and effort" (p.267).

Research on Engagement in Contractor and Temporary/Outsourced Work

Now consider a sampling of the articles in the cells of Table 2 that intersect the Engagement objective with the nonstandard work types of Independent Contractors and Outsourcer/Temporary Agency. They show that the themes are far more focused on testing behavioural theories and on examining the attitudinal and behavioural

characteristics of such workers. They often compare those workers to regular, full-time workers who are doing the same job or even working physically with the nonstandard workers.

The review by Connelly and Gallagher (2004) is an excellent illustration of the research on contingent workers, and its emphasis on various behavioural, attitudinal, and cognitive responses by those workers. Connelly and Gallagher organize the conclusions of their review according to several key attitudinal and behavioural outcomes. They conclude that findings about organizational commitment are mixed, and studies of "dual commitment" to the client and to temporary placement firms often find them to be positively correlated. Regarding job satisfaction,

> "Within the context of contingent work arrangements, research on satisfaction as well as other attitudinal and behavioral measures has also been closely linked to the issue of volition. Simply stated, positive worker responses to their jobs are closely tied to the extent to which they feel that their choice to work as a contingent was voluntary rather than from the lack of an alternative (e.g., Krausz, Brandwein & Fox 1995; Ellingson, Gruys & Sackett, 1998)" (p. 964).

Regarding role ambiguity and conflict they conclude:

> "most empirical research shows virtually no evidence of a strong or systematic relationship with status as a contingent worker (e.g., Krausz et al., 1995; Sverke, Gallagher & Hellgren, 2000). However, some research on direct-hire temporary workers in the manufacturing sector suggests that contingent workers actually have lower levels of role overload and role conflict in comparison to the permanent employees (Parker, Griffin Sprigg & Wall, 2002)" (p. 964).

They note that a key moderator between contingent or part-time work and positive work experiences is volition. Individuals who voluntarily choose or prefer such arrangements have more positive experiences and reactions than those who are doing such work because they cannot find permanent employment. They note:

> "There is evidence to suggest that a sizeable majority of contingents working through temporary-staff firms or direct-hire arrangements would prefer permanent employment (Hardy & Walker, 2003; Isaksson & Bellagh, 2002; Polivka & Nardone, 1989). In contrast, it is estimated that only a small minority of all independent contractors are interested in securing more permanent contractual arrangements (DiNatale, 2001)" (p. 965).

This is a consistent theme, that nonstandard workers are not invariably less satisfied or disadvantaged compared to permanent workers, and that the underlying relationship is more nuanced. A meta-analysis by Wilkin (2013) reached a similar conclusion, finding that results from 72 studies (N = 237,856) suggest that contingent workers experience slightly, but statistically significantly, lower job satisfaction than permanent employees (d=0.06). Contingent workers, however, are not homogeneous. Some (e.g., agency workers) experience lower job satisfaction than permanent employees, but others (e.g., contractors) experience similar job satisfaction to permanent employees.

Clinton, et al. (2011) surveyed 1,169 temporary workers in Europe. They found that prior experience as a temporary worker associated positively with individual performance, but was not associated with job insecurity, job satisfaction, or organizational commitment. Guest's (2004) review reached a similar conclusion, noting

that workers on flexible contracts are not invariably disadvantaged, and that knowledge workers pursuing boundaryless careers are especially likely to report positive outcomes. Allan and Sienko (1997) administered the Job Diagnostic Survey (JDS) of Hackman & Oldham (1980) to 149 and 48 permanent and contingent workers doing the same types of jobs in six locations of a large unit of a telecommunications company in various U.S. locations. Results showed contingent workers to have higher motivating potential scores, due to higher Task Identity and Feedback scores. Contingents also scored higher on Knowledge of Results and Growth Need Strength, while permanent employees were higher in Satisfaction with Job Security. Bardasi and Francesconi (2004) examined subjective indicators of mental health, general health status, life satisfaction and job satisfaction. To do that they compared workers with temporary contracts, part-time workers, and full-time workers, using a panel of 7,000 workers from the first 10 waves of the British Household Panel Survey, 1991-2000. They found "Controlling for background characteristics, atypical employment does not appear to be associated with adverse health consequences for either men or women …" (p. 1671).

Conclusions and Future Directions

Our review of theories and research frameworks that focus on the domain of nonstandard workers revealed stark differences between the kinds of questions studied with respect to more traditional and more recent nonstandard work arrangements. Research concerned with the former - outsourcing, temporary- help agencies, and part-time workers - tended to address cognition and attitudes. The latter include commitment, job satisfaction, volition, role conflict or role ambiguity, integration, trust, knowledge-sharing, perceived organizational support, justice/unfair treatment, psychological contract, well-being, and

organizational citizenship behaviors. Research with more recent forms of nonstandard work – freelance platforms and crowdsourcing – tends to emphasize processes or outcomes (use of social networks to enhance virtual collaboration, use of contests to create incentives, maximizing payoffs from crowdsourcing, generating useful ideas from innovation contests).

Collings (2014) has defined talent management as the management and development of high-performing and high-potential incumbents in critical organizational roles. The term "incumbents" is typically oriented toward traditional, standard employment arrangements, but if we substitute "workers" for "incumbents," then the definition seems to apply equally well to nonstandard workers. If the focus is on managing and developing high-performing and high-potential workers – whether inside or outside organizational boundaries, then talent management of nonstandard workers is a research topic that is fully appropriate in its own right. The relevant domain is large, and it constitutes a "big tent".

Our review provides several observations that may direct future research. First, Table 2 suggests that only a few regions of the map of work arrangements and talent-lifecycle elements are well populated. The cells with small numbers or zeros offer opportunities to extend research in more populated arenas to those with very little attention. In particular, despite the fact that it is clear that nonstandard work arrangements can fundamentally change virtually all talent- management practices and outcomes (Boudreau, et al., 2015), only a small amount of research has examined any of the practices through the lens of particular non-standard work arrangements.

Second, the research on newer forms of nonstandard work (Category 2) may fruitfully draw upon existing research on older forms of such work (Category 1). There is much to learn about the cognitions and attitudes of nonstandard workers in Category 2, yet these questions have gone largely unstudied. Processes and outcomes are undoubtedly important, but scientific disciplines are distinguished not so much by the subject matter they study as by the questions they ask. Social scientists focus on behavior, individual or collective, and the demand for deeper understanding of the behavioral effects of nonstandard employment is strong and continuing.

Third, one can make a symmetrical observation about what research on older forms of nonstandard work (Category 1) might learn from research on newer forms (Category 2). Studies of Category 2 work arrangements demonstrate ways to measure and compare work outcomes and processes under different talent practices, such as rewards and talent sourcing. Research on Category 1 work arrangements (and others) might benefit from incorporating process and outcome variables. For example, Connelly and Gallagher (2004) suggested that supervisors may narrow the scope of the tasks assigned to contingent workers. Doing so limits their jobs, but positively affects their job attitudes. We know very little about whether the work processes and assignments of nonstandard workers vary from those of standard workers, and how that may explain differences in attitudes as well as performance.

Among social scientists, numerous questions remain unanswered in the domain of talent management of nonstandard workers. We hope that this article may help point the way toward fruitful discoveries.

References

Aletraris, L. (2010). How satisfied are they and why? A study of job satisfaction, job rewards, gender and temporary agency workers in Australia. *Human Relations, 63*(8), 1129-1155.

Allan, P., & Sienko, S. (1997, Summer). A comparison of contingent and core workers' perceptions of their jobs' characteristics and motivational properties. *SAM Advanced Management Journal*, *62*(3), 4-9.

Ang, S., & Slaughter, S. A. (2001). Work outcomes and job design for contract versus permanent information systems professionals on software development teams. *MIS Quarterly, 25*(3), 321–350.

Ang, S., Van Dyne, L., & Begley, T. M. (2003). The employment relationships of foreign workers versus local employees: A field study of organizational justice, job satisfaction, performance, and OCB. *Journal of Organizational Behavior, 24,* 561-583.

Armisen, A., & Majchrzak, A. (2015). Tapping the innovative business potential of innovation contests. *Business Horizons, 58*(4)*,* 389-399.

Ashford, S. J., George, E., & Blatt, R. (2007). Old assumptions, new work: The opportunities and challenges of research on nonstandard employment. *Academy of Management Annals, 1*(1), 65-117.

Bardasi, E., & Francesconi, M. (2004). The impact of atypical employment on individual wellbeing: Evidence from a panel of British workers. *Social Science & Medicine, 58,* 1671-1688.

Barrett, P. M., & Elgin, B. (2015, August 10). The Arctic or bust. *Bloomberg Businessweek*, pp. 58-63.

Beard, K. M., & Edwards, J. R. (1995). Employees at risk: Contingent work and the psychological experience of contingent workers. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in organizational behavior* (Vol. 2, pp. 109–126). Chichester, UK: Wiley.

Bensinger, G. (2015, July 30). Startups scramble to define 'employee'. *The Wall Street Journal,* pp. B1, B5.

Bernhard-Oettel , C., Sverke, M., & De Witte, H. (2005). Comparing three alternative types of employment with permanent full-time work: How do employment contract and perceived job conditions relate to health complaints? *Work & Stress: An International Journal of Work, Health & Organisations, 19*(4), 301-318

Boswell, W. R., Watkins, M. B., Triana, M. D. C., Zardkoohi, A., Ren, R., & Umphress, E. E. (2012). Second-class citizen? Contract workers' perceived status, dual commitment, and intent to quit. *Journal of Vocational Behavior, 80,* 454-463.

Boudreau, J. W., Jesuthasan, R. & Creelman D. (2015). *Lead the Work*. Hoboken, NJ: Wiley.

Boudreau, J. W., & Ramstad, P. R. (2007). *Beyond HR*. Boston, MA: Harvard Business Publishing.

Broschak, J. P., & Davis-Blake, A. (2006). Mixing standard work and nonstandard deals: The consequences of heterogeneity in employment arrangements. *Academy of Management Journal, 49*(2), 371-393.

Broschak, J. P., Davis-Blake, A., & Block, E. S. (2008). Nonstandard, not substandard: The relationship among work arrangements, work attitudes, and job performance. *Work and Occupations, 35*(1), 3-43.

Buch, R., Kuvaas, B., & Dysvik, A. (2010). Dual support in contract workers' triangular employment relationships. *Journal of Vocational Behavior, 77,* 93-103.

Cascio, W. F., & Montealegre, R. (In press). How technology is changing work and organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 3.

Chambel, M. J., & Castanheira, F. (2006). Different temporary work status, different behaviors in organization. *Journal of Business and Psychology, 20*(3), 351-367.

Chambel, M. J., & Castanheira, F. (2012). Training of temporary workers and the social exchange process. *Journal of Managerial Psychology, 27*(2), 191-209.

Chambel, M. J., & Sobral, F. (2011). Training is an investment with return in temporary workers. *Career Development International, 16*(2), 161–177.

Chattopadhyay, P., & George, E. (2001). Examining the effects of work externalization through the lens of social identity theory. *Journal of Applied Psychology, 86*(4), 781–788.

Chiu, S. F., Lin, S. T., & Han, T. S. (2015). Employment status and employee service-oriented organizational citizenship behaviour. *Career Development International, 20*(2), 133-146.

Clinton, M., Bernhard-Oetell, C., Rigotti, T., & de Jong, J. (2011). Expanding the temporal context of research on non-permanent work. *Career Development International, 16*(2), 114-139.

Coase, R. H. (1993). The nature of the firm: Influence. In O. E. Williamson & S. G. Winter (Eds.). *The nature of the firm* (pp. 61-74). New York, NY: Oxford University Press.

Collinson, D. L. (1999). 'Surviving the rigs': Safety and surveillance on North Sea oil installations. *Organization Studies, 20*(4), 579–600.

Connelly, C. E., & Gallagher, D. G. (2004). Emerging trends in contingent work research. *Journal of Management, 30*(6), 959-983.

Davis-Blake, A., Broschak, J. P., & George, E. (2003). Happy together? How using nonstandard workers affects exit, voice, and loyalty among standard employees. *Academy of Management Journal, 46*(4), 475–485.

Davis-Blake, A., & Uzzi, B. (1993). Determinants of employment externalization: A study of temporary workers and independent contractors. *Administrative Science Quarterly, 38*(2), 195-223.

De Cuyper, N., & De Witte, H. (2006). Autonomy and workload among temporary workers: Their effects on job satisfaction, organizational commitment, life satisfaction, and self-rated performance. *International Journal of Stress Management, 13*(4), 441–459.

De Cuyper, N., De Witte, H., & Van Emmerik, H. (2011). Temporary employment: Costs and benefits for (the careers of) employees and organizations. *Career Development International, 16*(2), 104-113.

de Gilder, D. (2003). Commitment, trust and work behaviour. *Personnel Review, 32*(5), 588-604.

de Jong, J., & Schalk, R. (2010). Extrinsic motives as moderators in the relationship between fairness and work-related outcomes among temporary workers. *Journal of Business and Psychology, 25*(1)*,* 175-189.

DiNatale, M. (2001, March). Characteristics of and preference for alternative work arrangements, 1999. *Monthly Labor Review, 124,* 28-49.

Ellingson, J. E., Gruys, M. L., & Sackett, P. R. (1998). Factors related to the satisfaction and performance of temporary employees. *Journal of Applied Psychology, 83*, 913–921.

Feldman, D. C. (2006). Toward a new taxonomy for understanding the nature and consequences of contingent employment. *Career Development International, 11*(1), 28-47.

Feldman, D. C., Doerpinghaus, H. I., & Turnley, W. H. (1994, Autumn). Managing temporary workers: A permanent HRM challenge. *Organizational Dynamics*, *23*(2), 49–63.

Felfe, J., Schmook, R., Schyns, B., & Six, B. (2008). Does the form of employment make a difference? - Commitment of traditional, temporary, and self-employed workers. *Journal of Vocational Behavior, 72,* 81-94.

Freeman, R. B. (2002). The labour market in the new information economy. *Oxford Review of Economic Policy, 18*(3), 288-305.

Gallagher, D. G., & Parks, J. M. (2001). I pledge thee my troth. . . contingently:

Commitment and the contingent work relationship. *Human Resource Management Review, 11*, 181–208.

Gallagher, D. G., & Sverke, M. (2005). Contingent employment contracts: Are existing employment theories still relevant? *Economic and Industrial Democracy, 26*(2), 181-203.

Galup, S., Saunders, C., Nelson, R. E., & Cerveny, R. (1997). The use of temporary staff and managers in a local government environment. *Communication Research, 24*(6), 698–730.

Garrigos-Simon, F. J., Alcami, R. L., & Ribera, T. B. (2012). Social networks and Web 3.0: Their impact on the management and marketing of organizations. *Management Decision, 50*(10), 1880-1890.

George, E. (2003). External solutions and internal problems: The effects of employment externalization on internal workers' attitudes. *Organization Science, 14*(4), 386-402.

Guest, D. (2004). Flexible employment contracts, the psychological contract and employee outcomes: An analysis and review of the evidence. *International Journal of Management Reviews, 5/6*(1), 1-19.

Hackman, J. R., & Oldham, G. R. (1980). *Work Redesign*. Reading, MA: Addison-Wesley Publishing Co.

Hanratty, T. (2000). The impact of numerical flexibility on training for quality in the Irish manufacturing sector. *Journal of European Industrial Training, 24*(9), 505–512.

Hardy, D. J., & Walker, R. J. (2003). Temporary but seeking permanence: A study of New

Zealand temps. *Leadership and Organization Development Journal, 24*(3), 141–152.

Ho, V. T., Ang, S., & Straub, D. (2003). When subordinates become IT contractors: Persistent managerial expectations in IT outsourcing. *Information Systems Research, 14*, 66–86.

Isaksson, K. S., & Bellagh, K. (2002). Health problems and quitting among female "temps". *European Journal of Work and Organizational Psychology, 11*(1), 27–38.

Kane, G. C. (2014, Aug. 5). Leveraging the extended enterprise: MITRE's Handshake Tool builds virtual collaboration. *MIT Sloan Management Review*, Reprint #56111. Retrieved from http://mitsmr.com/1v6KaFO.

Karim, S., & Mitchell, W. (2000). Path-dependent and path-breaking change: Reconfiguring business resources following acquisitions in the U.S. medical sector, 1978–1995. *Strategic Management Journal, 21*(10/11) 1061–1081.

Krausz, M., Brandwein, T., & Fox, S. (1995). Work attitudes and emotional responses of permanent, voluntary, and involuntary temporary-help employees: An exploratory study. *Applied Psychology: An International Review, 44*(3), 217–232.

Lapalme, M. E., Simard, G., & Tremblay, M. (2011). The influence of psychological contract breach on temporary workers' commitment and behaviors: A multiple agency perspective. *Journal of Business Psychology, 26,* 311-324.

Lautsch, B. A. (2003). The influence of regular work systems on compensation for contingent workers. *Industrial Relations, 42*(4), 565–588.

Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The

relationships among human capital, employment, and human resource configurations. *Journal of Management, 28*(4), 517-543.

Liden, R. C., Wayne, S. J., Kraimer, M. L., & Sparrowe, R. T. (2003). The dual commitments of contingent workers: An examination of contingents' commitment to the agency and the organization. *Journal of Organizational Behavior, 24*, 609–625.

Lowry, D. S., Simon, A., & Kimberley, N. (2002). Toward improved employment relations practices of casual employees in the New South Wales registered clubs industry. *Human Resource Development Quarterly, 13*(1), 53–70.

Malhotra, A., & Majchrzak, A. (2014). Managing crowds in innovation challenges. *California Management Review, 56*(4), 103-123.

Mallon, M. (1998). The portfolio career: Pushed or pulled to it? *Personnel Review, 27*(5), 361-377.

Matusik, S. F., & Hill, C. W. L. (1998). The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of Management Review, 23*(4), 680–697.

McAllister, J. (1998). Sisyphus at work in the warehouse: Temporary employment in Greenville, South Carolina. In K. Barker & K. Christensen (Eds.), *Contingent work: American employment relations in transition* (pp. 221-242). Ithaca, NY: ILR Press.

McDonald, D. J., & Makin, P. J. (2000). The psychological contract, organizational commitment and job satisfaction of temporary staff. *Leadership & Organizational Development Journal, 21*(1/2), 84–91.

McDonald, R., & Kotha, S. (2014, July). *Boeing 787: The Dreamliner.* Boston, MA: Harvard Business School, Case No. N456-789.

Meyer, K.J., Somaya, D. & Williamson, I.O. (2012). Firm-specific, industry-specific, and occupational human capital and the sourcing of knowledge work. *Organization Science*, *23* (5) 1311-1329.

Miller, S. (2007). Collaboration is key to effective outsourcing. In Society for Human Resource Management, *2008 HR trend book* (pp. 58–61). Alexandria, VA: Society for Human Resource Management.

Millward, L. J., & Brewerton, P. M. (1999). Contractors and their psychological contracts. *British Journal of Management, 10*, 253-274.

Mirvis, P. H., & Hall, D. T. (1994). Psychological success and the boundaryless career. *Journal of Organizational Behavior, 15*(4)*,* 365-380.

Moorman, R. H., & Harland, L. K. (2002). Temporary employees as good citizens: Factors influencing their OCB performance. *Journal of Business and Psychology, 17*(2), 171-187.

Morgan, J., & Wang, R. (2010). Tournaments for ideas. *California Management Review, 52*(2), 77-97.

National Association of Professional Employer Associations. (2015). *What is a PEO?* Retrieved from www.napeo.org/peoindustry/faq.cfm

Parker, S. K., Griffin, M. A., Sprigg, C. A., & Wall, T. D. (2002). Effect of temporary contracts on perceived work characteristics and job strain: A longitudinal study. *Personnel Psychology, 55*, 689–719.

Parks, J. M., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round holes: Mapping the domain of contingent work arrangements onto the psychological contract. *Journal of Organizational Behavior, 19,* 697-730.

Pearce, J. L. (1993). Toward an organizational behavior of contract laborers: Their psychological involvement and effects on employee co-workers. *Academy of Management Journal, 36*(5), 1082–1096.

Peel, S., & Inkson, K. (2004). Contracting and careers: Choosing between self and organizational employment. *Career Development International, 9*(6/7), 542-558.

Pfeffer, J., & Baron, J. N. (1988). Taking the workers back out: Recent trends in the structuring of employment. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, pp. 257-303). Greenwich, CT: JAI Press.

Pofeldt, E. (2015, May 25). Shocker: 40% of workers now have 'contingent' jobs, says U.S. Government. *Forbes*. Retrieved from http://www.forbes.com/sites/elainepofeldt/2015/05/25/shocker-40-of-workers-now-have-contingent-jobs-says-u-s-government/

Polivka, A. E., & Nardone, T. (1989). On the definition of "contingent work." *Monthly Labor Review, 112*, 9–16.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*(3), 79–91.

Prpic, J., Shukla, P. P., Kietzmann, J. H., & McCarthy, I. P. (2015). How to work a crowd: Developing crowd capital through crowdsourcing. *Business Horizons, 58*(1), 77-85.

Quinlan, M., Mayhew, C., & Bohle, P. (2001). The global expansion of precarious employment, work disorganization, and consequences for occupational health: Placing the debate in a comparative historical context. *International Journal of Health Services, 31*(3), 507-536.

Rogers, J. K., & Henson, K. D. (1997). Hey, why don't you wear a shorter skirt? Structural vulnerability and the organization of sexual harassment in temporary clerical employment. *Gender & Society, 11*, 215–237.

Santos, F. M., & Eisenhardt, K. M. (2005). Organizational boundaries and theories of organization. *Organization Science, 16*(5), 491-508.

Schlagwein, D., & Bjorn-Andersen, N. (2014). Organizational learning with crowdsourcing: The revelatory case of LEGO. *Journal of the Association for Information Systems, 15*, 754-778.

Solomon, N. A., & Templer, A. J. (1993). Development of non-traditional work sites: The challenge of telecommuting. *The Journal of Management Development, 12*(5), 21-32.

Struggling with a supertanker. (2002, Feb 07). *The Economist, 362,* 52-53.

Sun, Y., Wang, N., Yin, C., & Zhang, J. X. (2015). Understanding the relationships between motivators and effort in crowdsourcing marketplaces: A nonlinear analysis. *International Journal of Information Management, 35,* 267-276.

Sveen, L. (2015, April 5). Changing social norms also changing the norms of work. *The Denver Post*, p. 2K.

Sverke, M., Gallagher, D. G., & Hellgren, J. (2000). Alternative work arrangements: Job stress, well-being and work attitudes among employees with different employment contracts. In K. Eriksson, C. Hogstedt, C. Eriksson, & T. Theorell (Eds.), *Health hazards in the new labour market* (pp. 145–167). London: Kluwer Academic/Plenum Press.

Torka, N., & Schyns, B. (2007). On the transferability of "traditional" satisfaction theory to non-traditional employment relationships: Temp agency work satisfaction. *Employee Relations, 29*(5), 440-457.

Uzzi, B., & Barsness, Z. I. (1998). Contingent employment in British establishments: Organizational determinants of the use of fixed-term hires and part-time workers. *Social Forces, 76*(3), 967–1007.

Van Breugel, G., Van Olffen, W., & Olie, R. (2005). Temporary liaisons: the commitment of 'temps' towards their agencies. *Journal of Management Studies, 42*(3), 539-566.

Van Dyne, L., & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal, 41*(6), 692–703.

Virtanen, M., Kivimaki, M., Virtanen, P., Elovainio, M., & Vahtera, J. (2003). Disparity in occupational training and career planning between contingent and permanent employees. *European Journal of Work and Organizational Psychology*, *12*(1), 19–36.

Wheeler, A. R., & Buckley, M. R. (2001). Examining the motivation process of temporary employees. *Journal of Managerial Psychology, 16*(5), 339–354.

Who will supply all the parts? (2003, June 15). *The Seattle Times*, Retrieved from http://community.seattletimes.nwsource.com/archive/?date=20030615&slug=7e73question15

Wilkin, C. L. (2013). I can't get no job satisfaction: Meta-analysis comparing permanent and contingent workers. *Journal of Organizational Behavior, 34*, 47–64.

Yang, X. (2012). Contingent worker, permanent loser? - How perceived trust shapes communication between contingent workers and standard workers in knowledge-based organizations. *International Journal of Business and Social Science, 3*(8), 172-180.

Zeitz, G., Blau, G., & Fertig, J. (2009). Boundaryless careers and institutional resources. *The International Journal of Human Resource Management, 20*(2), 372-398.