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Journal of Workplace Behavioral Health

ISSN: 1555-5240 (Print) 1555-5259 (Online) Journal homepage: https://www.tandfonline.com/loi/wjwb20

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To cite this article: Abay Getahun Asfaw & Chia-Chia Chang (2019) The association between job insecurity and engagement of employees at work, Journal of Workplace Behavioral Health, 34:2, 96-110, DOI: 10.1080/15555240.2019.1600409

To link to this article: https://doi.org/10.1080/15555240.2019.1600409

JOURNAL OF WORKPLACE BEHAVIORAL HEALTH
2019, VOL. 34, NO. 2, 96–110
https://doi.org/10.1080/15555240.2019.1600409

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The association between job insecurity and engagement of employees at work

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ABSTRACT

This study examined the association between employees' perceived job insecurity and employee engagement. Using Gallup-Sharecare Well-Being Index (2008–2014) data, we applied logistic regressions to examine the association between job insecurity and engagement, controlling for covariates. The job insecurity variable was also interacted with the supervisor support variable. We found that perceived job insecurity was associated with reduced engagement and that this may be moderated by supervisor support. This is the first study using nationally representative data to examine the role of supervisor support in mitigating the negative impact of job insecurity on engagement.

ARTICLE HISTORY
Received 13 April 2018
Revised 22 March 2019
Accepted 24 March 2019

KEYWORDS
Job insecurity; employee engagement; supervisor support; Gallup; downsizing; workforce reduction

During economic downturns and periods of financial uncertainty, companies lay off employees to reduce costs. In general, the uncertainty of the future existence of a job has been referred to as job insecurity (De Witte, 2005). There is no straightforward method to measure job insecurity (Nardone, Veum, & Yates, 1997). One commonality among definitions is that uncertainty about the continuation of the current job (De Witte, 2005). Another common component is that it is involuntary. Sverke, Hellgren, and Näswall (2002) considered job insecurity to be "subjectively experienced anticipation of a fundamental and involuntary event related to job loss." Workers may feel insecure about their jobs for many reasons: contingent and other uncertain employment arrangements; economic downturns; a need or desire by employers for flexibility; low sense of control by workers; organizational restructuring such as mergers, acquisitions, site closings, reorganization; changes in job design and fit; outsourcing; relationships with supervisors; and automation (Bryson, Cappellari, &

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Lucifora, 2009; Greenhalgh & Rosenblatt, 1984; Jeon & Shapiro, 2007; Levine, 2005; McGuinness & Wooden, 2009; Nardone et al., 1997; Probst, 2002; Sverke et al., 2002).

The effects of job insecurity include adverse physical and mental health of employees (Bryson et al., 2009; De Witte, Pienaar, & De Cuyper, 2016; Probst, Stewart, Gruys, & Tierney, 2007; Sverke et al., 2002). Mental health problems examined in research have included depression, anxiety, psychological distress and burnout, emotional exhaustion, and stress (De Witte et al., 2016; Dekker & Schaufeli, 1995; May, Gilson, & Harter, 2004). Physical health problems included self-reported morbidity and issues such as back pain, headaches, and fatigue (Burgard, Brand, & House, 2009; Ferrie, Shipley, Stansfeld, & Marmot, 2002; Heaney, Israel, & House, 1994). Physiological changes have been observed, including increases in blood pressure and decreases in Body Mass Index (Ferrie et al., 2002).

Besides health, another effect of job insecurity is changes in organizational performance (Probst et al., 2007; Sverke et al., 2002) and engagement by employees at work (De Witte et al., 2016; Dekker & Schaufeli, 1995; Demerouti et al., 2001; Rothmann & Rothmann, 2010). The framework for engagement is broad, but the concept impacts employees and their employers. The terms *employee engagement* and *work engagement* are often considered interchangeably in the literature (Attridge, 2009; Rothmann & Rothmann, 2010; Schaufeli & Bakker, 2010). Harter, Schmidt, and Hayes (2002) defines *employee engagement* as "the individual's involvement and satisfaction with as well as enthusiasm for work." Research has found that strengthening engagement at work can lead to better health and well-being for employees (Bakken & Torp, 2012). Harter et al. (2002) found a relationship between engagement and organizational performance domains such as customer satisfaction, profitability, and productivity, as well as safety and turnover. Attridge (2009) reviewed measures of engagement and found evidence of benefits to employers, such as better customer service ratings, increased sales, and better safety outcomes. Given that engagement has been shown to be a key predictor of productivity and profitability of an organization (Hewitt Associates, 2004; Kompaso & Sridevi, 2010), its importance is very critical in times of job uncertainty (Macey & Schneider, 2008). One mechanism for the decrease in productivity could be due to decreased creativity and innovation during times of downsizing and perceptions of job insecurity (Probst et al., 2007). Greenhalgh and Rosenblatt (1984) explained that the relationship between job insecurity and productivity may be due to worker reactions to job insecurity such as reduced effort and organizational withdrawal (Dekker & Schaufeli, 1995).

According to the job demands-resources model, job security can be an organizational resource that is an indicator of engagement (Demerouti

et al., 2001; Rothmann & Rothmann, 2010). For example, there is a relationship between engagement and career opportunities, growth, and advancement (Bakker & Demerouti, 2007; Rothmann & Rothmann, 2010). May et al. (2004) explained that cognitive, emotional, and physical resources, as well as safe psychological conditions, are associated with engagement in tasks at work. Studies that looked at engagement have used scales such as the Utrecht Work Engagement Scale (UWES) (Seppälä et al., 2009) and Gallup's Q12 Questionnaire (Mahajan & Sharma, 2015), as well as the Oldenburg Burnout Inventory (OLBI) (Demerouti & Bakker, 2008).

Although Vander Elst, Bosman, Cuyper, Stouten, and Witte (2013) examined the role positive affect can have on engagement, more research is needed on whether supervisors can serve as moderators for the relationship between job insecurity and engagement. There has not been conclusive evidence about the impact of supervisor support on engagement in situations of job insecurity. Demerouti et al. (2001) applied the OLBI to look at disengagement from work, defined as "distancing oneself from the object and the content of one's work, job resources such as supervisor support (e.g., 'My supervisor keeps distance from his/her employees'), and job security ('The threat of losing this job is very low')". They found that a positive relationship with supervisors may reduce the psychological impact of job insecurity. This is similar to the findings of Datta, Guthrie, Basuil, and Pandey (2010) from a review and synthesis of research on downsizing that found that supervisor support and greater perceived job control mitigated the effects of downsizing. However, Dekker and Schaufeli (1995) looked at job insecurity (measured by items such as "Do you expect to be in your current position five years from now?") and social support from management (for example, whether management will "treat its employees fairly") and found that the latter did not mitigate negative effects of job insecurity such as the feelings of job withdrawal (e.g., "Do you feel involved with your work?"). Although Wang, Lu, and Siu (2015) recognized the importance of supervisors in conducting the performance evaluations of employees, the study did not specifically consider the role of supervisors themselves.

Given the relevance of supervisors to the working lives of employees and the differences in research findings, this study contributes to the literature by further exploring the impact of supervisor support and helping to provide a better understanding of the influence that supervisors may have on engagement. This study moves the field forward by applying the theoretical framework of organizational resources to the role of supervisors and uses items that have not been examined previously (trusting environment and treatment as partner). Furthermore, this paper uses data from a nationally representative sample in the United States, expanding knowledge beyond

studies from specific companies (Vander Elst et al., 2013; Wang et al., 2015).

The major objective of this paper was to examine the association between job insecurity and employee engagement. Because studies have shown that job insecurity is an organizational resource that can increase the stress level of workers (Cranny et al., 1992) and is linked to engagement (De Witte et al., 2016; Dekker & Schaufeli, 1995; Demerouti et al., 2001; Rothmann & Rothmann, 2010), we hypothesize that job insecurity can negatively affect workers' health, attitude, and work morale (Kuhnert, Sims, & Lahey, 1989; Roskies & Louis-Guerin, 1990; Sverke et al., 2002) and, could significantly decrease their engagement. Based on the research that supervisors can impact the influence of job security on engagement (Datta et al., 2010; Demerouti et al., 2001), the paper also examined if workplace support systems, such as supervisor support, could help to mitigate potential reductions in engagement when employees perceive company downsizing. This paper provides additional evidence on the relationship between supervisor support, employee engagement, and job insecurity using the Gallup-Sharecare Well-Being Index. Recognized for its assessment of well-being, the Index has not been applied to research on job insecurity and engagement.

Data and method

The data source for this study was the Gallup-Sharecare Well-Being Index (http://www.well-beingindex.com/). Gallup uses live telephone interviews, dual-frame random-digit-dialing sampling, and a random within household selection method for landline users to select one respondent per household. Gallup then conducts a daily survey asking 1000 U.S.-based adults, ages 18 and older, about various political, economic, and well-being topics. This study used data collected from 2008 to 2014. We considered only individuals working in the private sector at the time of the interview. We excluded public sector employees from our research because they have relatively more job security than private sector employees do (Buelens & Van den Broeck, 2007; Jurkiewicz, Massey Jr., & Brown 1998).

We measured engagement, our dependent variable, by using the responses to the following Gallup question: "At work, do you get to use your strengths to do what you do best every day, or not (yes, no, I don't know, refused)?" The response to this question would give a good proxy to the definition of work engagement as "positive work-related state of mind that is characterized by vigor, dedication, and absorption" (Bakker & Schaufeli, 2008; Schaufeli & Salanova, 2007). We dropped respondents who refused to answer this question and replied 'I don't know' (2.3%). Our

main explanatory variable was job insecurity. The Gallup data provided information on the general perception of employees about their companies' workforce size changes. Specifically, respondents were asked the question:

> Now thinking more generally about the company or business you work for, including all of its employees. Based on what you know or have seen, would you say that, in general, your company or employer is (1) hiring new people and expanding the size of its workforce, (2) not changing the size of its workforce, or (3) letting people go and reducing the size of its workforce?

We considered respondents who answered (3) as job insecure. This question aligns with definitions of *job insecurity* because it asks about the future of jobs at the company and possibilities for jobs ending not through the choice of the worker.

Supervisor support was measured by the responses to the following two questions: "Does your supervisor at work treat you more like he or she is your boss or your partner (boss, partner, does not apply, don't know, refused)?" and "Does your supervisor always create an environment that is trusting and open or not (yes, no, does not apply, don't know, refused)?" We considered the responses indicating a partner-like and trusting supervisor as having supervisor support. We dropped respondents who replied "I don't know" or who refused to answer the above two questions (1.5% of our sample). The impact of job insecurity on engagement might be affected by various demographic and socioeconomic factors. To account for these factors, we included the following covariates in the multivariable analysis: age (in years), sex (1 for male and 0 for female), marital status (married, separated, divorced, widowed, and domestic partnership), overall health status (1 if excellent/very good and 0 otherwise), regular exercise (1 if the respondent exercises 3 days or more with 30 min or more of exercise per week and 0 otherwise), smoking status (1 if currently smoking and 0 otherwise), Body Mass Index (BMI), education (1 if college degree and 0 otherwise), family monthly income (nine categories), and occupation (12 categories). We also included the year of the survey (2008–2014) to take into account the impact of time variant macroeconomic variables.

Overall, we considered 376,102 respondents who were employed in the week prior to the survey and had complete information for all the variables that we analyzed. We used the weight variable provided by Gallup to make the data representative of the U.S. population. We used logistic regressions to examine the association between job insecurity and engagement, controlling for covariates. We interacted the job insecurity variable with the supervisor support variable to explore if positive supervisor support helped to lessen the negative impact of job insecurity on engagement. We used the Wilcoxon rank-sum test (instead of the Student t test) whenever the variables were not normally distributed.

Table 1. Descriptive statistics of the variables used in the study stratified by job security status.

	Job security		
Variable	Secure	Insecure	Total
Number of observations	306,585	69,517	376,102
Employee engagement (%)[a]	85.69	78.59	84.42
Supervisor support (%)[b]	59.04	46.39	56.78
Male (%)	54.47	55.47	54.65
Age in years (average)	40.51	43.30	41.01
Excellent/very good overall health (%)[c]	60.41	55.05	59.45
Smoking (%)	21.27	22.09	21.42
College degree (%)	14.02	15.67	14.32
Marital status (column %)			
Single never married	28.11	20.67	26.78
Married	53.58	58.86	54.52
Separated	2.07	2.23	2.10
Divorced	8.72	10.49	9.04
Widowed	1.85	1.99	1.88
Domestic partnership	5.67	5.76	5.69
Monthly family income (column %)			
Under $499	1.27	1.07	1.23
$500–$999	3.43	3.23	3.40
$1000–$1999	12.02	12.10	12.04
$2000–$2999	14.07	13.70	14.00
$3000–$3999	12.64	12.31	12.58
$4000–$4999	11.86	11.60	11.82
$5000–$7499	20	20.40	20.07
$7500–$9999	8.82	9.41	8.92
$10,000 and over	15.89	16.22	15.95
Body mass index (average)	24.21	27.49	27.26
Regular exercise[d] (%)	51.99	51.44	51.89
Occupation (column %)			
Professional	22.75	24.61	23.08
Manager/executive/official	9.89	10.57	10.01
Business owner	0.68	0.64	0.67
Clerical	7.21	6.80	7.14
Sales	9.06	7.61	8.80
Service	16.02	13.43	15.55
Construction	4.81	6.37	5.09
Manufacturing	5.78	6.80	5.96
Transportation	3.54	3.03	3.45
Installation/repair	2.47	2.76	2.52
Farming	1.07	0.80	1.03
Other	16.72	16.59	16.69

[a]If the respondent uses her/his strengths to do what s/he does best every day and 0 if otherwise.
[b]If a supervisor at work treats the respondent like his/her partner or if the supervisor always creates an environment that is trusting and open and 0 if otherwise.
[c]If the respondent says her/his health, in general, is excellent or very good and 0 if otherwise.
[d]If the respondent exercises 3 days or more with 30 min or more of exercise per week.

Results

Table 1 presents descriptive statistics for all variables considered in the study, stratified by job security status. Figure 1 shows the trend of job insecurity from 2008 to 2014. The highest percentage of employees who reported job insecurity was in 2009 (26.15%) and then the percentage declined, reaching 12.52% in 2014.

Workers in the construction, manufacturing, and installation/repair occupations were more job insecure than workers in farming, service, and sales

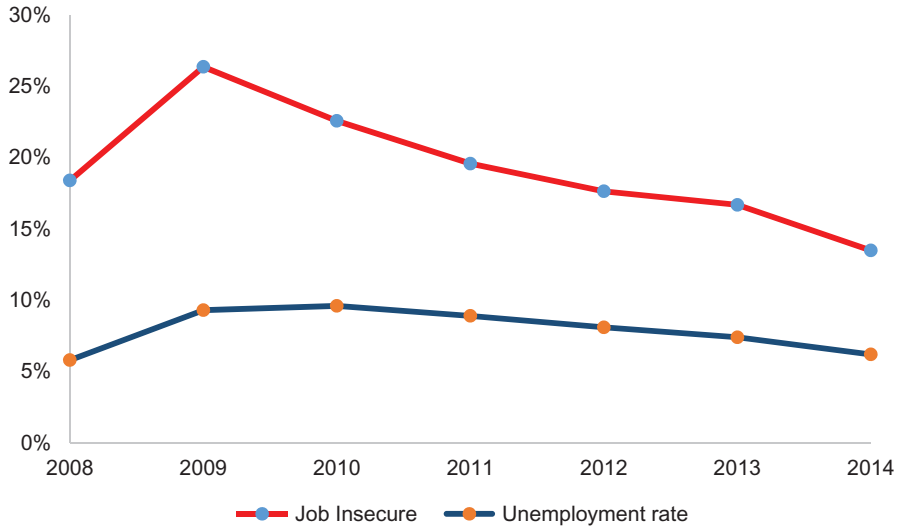

Figure 1 Percentage of job insecure respondents and the national unemployment rate.

occupations. Our descriptive analysis also showed that 85.69% of job secure workers were engaged (used their strengths to do what they did best every day) while 78.59% of job insecure workers were engaged. This 7.1 percentage point difference in engagement between the two groups was statistically significant at the less than 1 percent level (Wilcoxon rank-sum test, $z = 46.33$, prob. $> |z| = 0.0001$).

We estimated a logistic regression model to control for the effect of covariates. The results are presented in Table 2. The coefficient of the job insecurity variable took the expected sign and was statistically significant. Job insecurity decreased the odds of engagement by 37% (95% confidence interval [CI] [35%, 38%]), controlling for covariates. Supervisor support more than doubled the odds of engagement. Male, college educated, never married, and low-income employees were less likely to be engaged. Good health and regular exercise increased the odds of engagement. Employees in construction and installation/repair occupations were more likely to be engaged compared to employees in the reference–professional–occupation. Engagement increased steadily from 2008 to 2014.

The job insecurity variable was interacted with the supervisor support variable to examine if improved supervisor support could help to moderate the negative impact of job insecurity on engagement. Adding interaction terms to our model could expand our understanding of the relationships among job insecurity, engagement and supervisor support, and would enable us to test the hypothesis that the relationship between job insecurity and engagement was different for workers with and without good supervisor support. Figure 2 presents the odds ratios for job insecurity, supervisor support, and the interaction between the two variables, controlling for

Table 2. Association between job insecurity and employee engagement: logistic regression results.

Variable	OR [95% CI]
Job insecurity	0.63 [0.62, 0.65]
Supervisor support	2.19 [2.14, 2.24]
Job insecurity × Supervisor support	
Male	0.82 [0.80, 0.84]
Age	1.01 [1.01, 1.01]
Excellent/very good overall health	1.23 [1.20, 1.26]
Smoking	1.02 [0.99, 1.05]
College degree	0.93 [0.90, 0.96]
Marital status: never married (Ref.)	
Married	1.34 [1.30, 1.38]
Separated	1.16 [1.07, 1.26]
Divorced	1.16 [1.11, 1.21]
Widowed	1.27 [1.17, 1.37]
Domestic partnership	1.14 [1.09, 1.21]
Monthly family income: under $499 (Ref.)	
$500–$999	0.79 [0.61, 1.01]
$1000–$1999	0.88 [0.69, 1.12]
$2000–$2999	0.91 [0.71, 1.15]
$3000–$3999	0.93 [0.73, 1.19]
$4000–$4999	1.00 [0.78, 1.27]
$5000–$7499	1.02 [0.80, 1.29]
$7500–$9999	1.10 [0.87, 1.41]
$10,000 and over	1.11 [0.87, 1.42]
Body mass index	1.00 [1.00, 1.01]
Regular exercise	1.16 [1.13, 1.18]
Occupation: professional (Ref.)	
Manager/executive/official	0.90 [0.86, 0.94]
Business owner	0.82 [0.71, 0.96]
Clerical	0.48 [0.46, 0.50]
Sales	0.59 [0.56, 0.62]
Service	0.61 [0.59, 0.64]
Construction	1.07 [1.00, 1.14]
Manufacturing	0.65 [0.61, 0.68]
Transportation	0.61 [0.57, 0.65]
Installation/repair	1.16 [1.07, 1.27]
Farming	0.84 [0.74, 0.95]
Other	0.72 [0.70, 0.75]
Survey year: 2008 (Ref.)	
2009	1.06 [0.99, 1.12]
2010	1.11 [1.05, 1.17]
2011	1.09 [1.03, 1.16]
2012	1.12 [1.06, 1.18]
2013	1.14 [1.07, 1.21]
2014	1.21 [1.12, 1.30]
Constant	2.77 [2.14, 3.57]

Note. OR = odds ratio; CI = confidence interval.

covariates. The results indicate that after controlling for covariates, supervisor support increased the odds of engagement in job insecure employees by 13% (95% CI [1.07, 1.19]).

Discussion

Studies have shown that job insecurity or uncertainty about future job prospects can lead to job disengagement, disinvolvement, or psychological withdrawal (Attridge, 2009; Datta et al., 2010; De Witte et al., 2016; Dekker

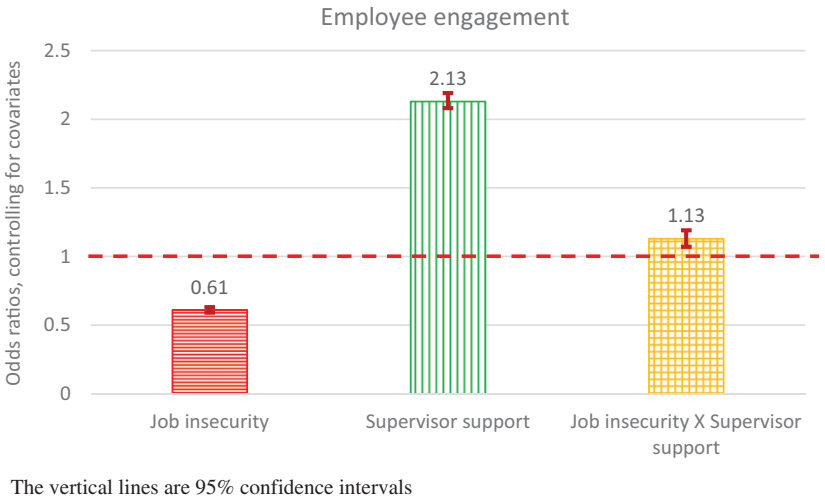

Figure 2. Odds ratios of job insecurity, supervisor support, and interaction between the two variables, controlling for covariates.

& Schaufeli, 1995; Demerouti et al., 2001; Jeon & Shapiro, 2007; Rothmann & Rothmann, 2010). In this study, we measured job insecurity using the general perception of employees about their companies' workforce size changes. We examined the reliability of this variable by comparing it with the overall unemployment rate in the country during our study period-2008–2014. As shown in Figure 1, the trend of the job insecurity variable mimics the national unemployment trend reported by the Bureau of Labor Statistics (Bureau of Labor Statistics, n.d.). This increases the reliability of the answers given in the Gallup questionnaire for this variable. The descriptive and the multivariable analyses showed statistically significant association between job insecurity and engagement. Our results also showed that supervisor support might help mitigate the negative consequences of job insecurity on engagement. Supervisor support increased the odds of engagement of job insecure employees by 13%, after controlling for covariates, suggesting that supervisors may play an important role in improving the engagement of job insecure employees by treating them like partners and creating an open and trusting environment. Controlling for covariates, the odds of job-insecure workers actively engaged in their work was 0.63 times less than that of job secure workers.

Research has demonstrated that supportive supervisor practices improve engagement of employees and the overall performance of companies (Bakken & Torp, 2012; Harter et al., 2002). Attridge (2009) recommended paying more attention to organizational-level interventions to better address engagement. For example, greater perceived job control (Datta et al., 2010) and organizational participation (Vander Elst et al., 2010) can help to reduce the impact of job insecurity on employee well-being. The

organization of work, organizational culture and leadership, job design, working conditions, communications, participation, and social support are all job resources related to job engagement (Attridge, 2009; Bakker & Demerouti, 2007; Rothmann & Rothmann, 2010). Work engagement is also related to the use of personal strengths at work (Clifton & Harter, 2003; Harzer & Ruch, 2013; van Woerkom, Oerlemans, & Bakker, 2016; Wood & de Menezes, 2011) and can result in better job performance, decreased absence due to sickness, and improved well-being (Bakken & Torp, 2012; Seligman & Csikszentmihalyi, 2002; van Woerkom et al., 2016). Bakken and Torp (2012) concluded that job resources could create healthy work environments, strengthen engagement, and improve organizational performance.

This study offers practical implications for moderating the impact of job insecurity on engagement. The results point to opportunities for training supervisors on treating employees as partners and creating trusting environments. Through development of organizational resources such as supervisor support and better relationships at work, companies can reduce the effect of job insecurity and facilitate continued engagement by workers during times of unpredictability and threats to employment situations.

Limitations and future research

Our study has some limitations. First, we measured the job insecurity variable indirectly by asking workers about how they perceived workforce size changes where they work. While the question does not directly ask about the respondent's own job, the concept of job insecurity has been studied in the context of overall organizational environment (Greenhalgh & Rosenblatt, 1984; Sverke et al., 2002). Asking about changes to the organization is relevant because organizational resources impact job security (Demerouti et al., 2001). The limitation to this construct validity can be addressed through the use of other items in future work. Second, we assessed engagement by perceptions of employees about their ability to use their strengths to do what they do best every day, not by directly asking about their engagement. These measurement issues may hinder our ability to accurately quantify both job insecurity and employee engagement. Since there has been no widely accepted definition for engagement, our study contributes to the literature by examining another method for measuring engagement. The use of strengths at work can contribute to involvement, satisfaction, and enthusiasm, aspects of engagement in the definition by Harter et al. (2002). Harter et al. (2002) includes the use of strength as a domain for engagement, and this study is valuable by shedding light on how this definition of engagement relates to job insecurity. Future studies

might measure job insecurity and engagement directly and examine causation between job insecurity and engagement. Using the Gallup-Sharecare Well-Being Index provided a nationally representative sample; however, use of other instruments in the future may be useful for improving the construct validity by including items that use different measures for job insecurity, engagement, and organizational resources such as supervisor support.

Conclusion

This study suggests that companies may mitigate the negative impact of job insecurity on engagement through improved supervisor supports. Comparing the engagement of those who perceived job insecurity through downsizing and those who did not perceive job insecurity, we found that higher levels of perceived job insecurity were associated with lower levels of engagement. By analyzing differences in supervisor support, we found that positive supervisor support may help reduce the negative association between job insecurity and engagement. Further research could analyze strategies for supervisory practices that are effective at improving employee engagement. In situations in which workforce reductions are unavoidable, research would be beneficial to identify other policies and practices that can mitigate the negative impact of perceived job insecurity on employees and employers. This study has contributed toward the understanding of the role that supervisors and leadership can play in maintaining engagement of workers during times of job insecurity, such as economic uncertainty and potential downsizing. During situations that may cause job insecurity, firms can minimize changes in productivity, engagement, and worker health and well-being by improving and increasing organizational resources such as developing a supportive environment from supervisors.

Acknowledgment

We would like to thank Toni Alterman, Sara Luckhaupt, Tsai Rebeca, and Regina Pana-Cryan, Casey Chosewood, all from CDC-NIOSH for their valuable comments and suggestions on the earlier version of the paper.

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Appendix: Association between job insecurity and employee engagement: logistic regression results with interaction variable.

Variable	OR [95% CI]
Job insecurity	0.61 [0.59, 0.63]
Supervisor support	2.13 [2.08, 2.19]
Job insecurity × Supervisor support	1.13 [1.07, 1.19]
Male	0.82 [0.80, 0.84]
Age	1.01 [1.01, 1.01]
Excellent/very good overall health	1.23 [1.20, 1.26]
Smoking	1.02 [0.99, 1.05]
College degree	0.93 [0.90, 0.96]
Marital status: never married (Ref.)	
Married	1.34 [1.30, 1.38]
Separated	1.16 [1.07, 1.26]
Divorced	1.16 [1.11, 1.21]
Widowed	1.27 [1.17, 1.37]
Domestic partnership	1.14 [1.08, 1.21]
Monthly family income: under $499 (Ref.)	
$500–$999	0.79 [0.61, 1.01]
$1000–$1999	0.88 [0.69, 1.12]
$2000–$2999	0.91 [0.71, 1.15]
$3000–$3999	0.93 [0.73, 1.19]
$4000–$4999	1.00 [0.78, 1.27]
$5000–$7499	1.02 [0.80, 1.29]
$7500–$9999	1.10 [0.87, 1.41]
$10,000 and over	1.11 [0.87, 1.42]
Body mass index	1.00 [1.00, 1.01]
Regular exercise	1.16 [1.13, 1.18]
Occupation: professional (Ref.)	
Manager/executive/official	0.90 [0.86, 0.94]
Business owner	0.82 [0.71, 0.96]
Clerical	0.48 [0.46, 0.50]
Sales	0.59 [0.56, 0.62]
Service	0.61 [0.59, 0.64]
Construction	1.07 [1.00, 1.14]
Manufacturing	0.65 [0.61, 0.68]
Transportation	0.61 [0.57, 0.65]
Installation/repair	1.16 [1.07, 1.27]
Farming	0.84 [0.74, 0.95]
Other	0.72 [0.70, 0.75]
Survey year: 2008 (Ref.)	
2009	1.06 [0.99, 1.12]
2010	1.11 [1.05, 1.17]
2011	1.09 [1.03, 1.16]
2012	1.12 [1.06, 1.18]
2013	1.14 [1.07, 1.21]
2014	1.21 [1.12, 1.30]
Constant	2.79 [2.16, 3.61]

Note. OR = odds ratio; CI = confidence interval.