

# Change Comes at a Cumulative Cost Make it Worth the Investment!

By: Kristin Cullen-Lester and Bryan Edwards





*People in many industries experience multiple, overlapping workplace changes. The experience in healthcare, captured in this description provided by one medical professional, is a prime example. “In the last year at my hospital, we adopted a new electronic documentation system, which impacted online results, order entry, medical administration, patient records and documentation, we also received new IV pumps, changed our visiting policy, changed our staff scheduling procedure, and hired a new educator. These changes are in addition to new medications as well as new practice standards and policies that happen regularly.” All of this change in healthcare happens in the context of regulatory, legislative, and judicial changes, that together place high demands on employees.*

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# Introduction

Many organizations find themselves at a point of change saturation (Pasmore, 2015). It's old news that the workplace is turbulent and change does not follow an orderly, linear path. Existing change management tools and approaches are insufficient for addressing all the change that is occurring. There is simply too much going on, and change cannot be managed using simple step-by-step models.

Leaders cannot ignore the seemingly never-ending, planned and unplanned changes co-occurring in their organizations. All this change is costly. Things rarely return to normal once workplace changes are implemented, and organizational resources are often insufficient to implement changes in parallel and still deliver on daily operations. Reorganizations, mergers and acquisitions, technology upgrades, personnel transitions, and other changes cost more than the organization's time and money. **All changes require employees to use precious resources to adapt. There is a cost to each and every employee.**

The prevailing notion is that employees are fatigued by the multiple, frequent planned and unplanned changes in their workplace that overlap, interact, and often contradict each other

(Bernerth, Walker, & Harris, 2011, Rafferty & Griffin, 2006). But, employees' reactions to the workplace changes differ; ranging from active resistance to ambivalence to enthusiasm. The predominant focus on negative effects of multiple workplace changes may be missing an important point. Is it possible that change may act as positive turbulence? Might employees actually gain energy or renewed loyalty to their organization if they experienced multiple changes in their workplace as positive, rather than neutral or negative?

The experience of employees faced with multiple changes is not well-understood because research and practice have largely focused on the implementation of single, planned change interventions. To answer the questions posed above and many others regarding change, we created a survey to measure the amount of change employees experience in their workplace and their reactions to these changes. This survey was used in four studies (see the About the Research section) and the results provided a new look at change. In the end, not all change was bad, and the cumulative effects of change all came back to the resources employees use to adapt and have available to thrive in the changing workplace.

## Employees describe their changing workplace:

“Rules and regulations accepted previously can change rapidly and without notice. This causes rejection, duplication, and redundancy of work.”

“It is more difficult to stay focused as we have five parallel initiatives going at once.”

# Is the Cumulative Change Drain Inevitable?

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All change, whether big or small, good or bad, requires adjustment. When employees adapt or adjust to change they invest valuable resources. Time, effort, cognitive and physical energy are all invested by employees to make sense of their changing workplace. Employees must learn new information and skills, change their behaviors, and even think and feel differently. Multiple changes amplify the demands placed on individuals, and the cumulative effect may drain employees' resources.

If all changes are inherently draining, then the more turbulent the workplace, the worse employees will react. Indeed, researchers have found that fatigue from change is associated with reduced employee commitment to the organization (Bernerth et al., 2011). Further frequent workplace changes are associated with increased perceptions of uncertainty (Rafferty & Griffin, 2006) and ultimately lower job satisfaction and performance (Cullen, Edwards, Casper, & Gue, 2014). So, not only can a turbulent workplace reduce employees'

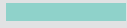
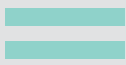

commitment to their organization, but multiple changes may also deplete employees' resources to the point where they become dissatisfied and are no longer able to invest high levels of involvement in their work.

**The research literature, popular press, and conventional wisdom would conclude that the very nature of a modern organization, full of frenetic change, is designed to bankrupt employees' resources.**

However, many employees are successful in a turbulent workplace, so concluding that organizational change puts a drain on employees' resources may not be the complete picture. Missing from theories, measures, and management of change is a consideration for how employees believe the change has or will impact their job. We argue that employees' appraisals of change vary, but fall into three categories of valence: negative, neutral, and positive (see Table 1).

Table 1

## Employees' Appraisals of Change

	 <b>Negative Workplace Change</b>	 <b>Neutral Workplace Change</b>	 <b>Positive Workplace Change</b>
<b>Definition</b>	Changes that reduce access to a variety of resources.	Changes that do not change the resources available to employees.	Changes that increase access to a variety of resources.
<b>Example</b>	A new supervisor provides less emotional support and micro-manages direct reports, decreasing their ability to make independent decisions.	A new physical layout of the office building has no noticeable impact on employees' jobs, including their ability to interact with coworkers, space necessary for working, etc.	A new knowledge management system provides greater access to information, reduces time spent searching for information, and increases the autonomy employees have to complete their work.

### Employees describe positive change in their workplace:

“The new software is just so much easier and reliable to work with; plus it can be logged on from anywhere instead of just one workstation.”

“A change in job duties gave me the opportunity to expand my influence on my colleagues.”

# Understanding the Impact of Change on Employees

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Even when organizations and change-management practitioners follow the best research-based practices, the majority of change initiatives fail to meet the objectives for which they are initiated. Many workplace changes are introduced with momentum and zeal, but it is the employees of an organization who make changes come alive each day. Their reactions to change play a critical role in determining whether change initiatives succeed or fail.

As employees experience each new workplace change, they invest time, effort, cognitive and physical energy to make sense of their changing workplace, learn new knowledge and skills, and adjust their attitudes and behaviors to successfully adapt. As shown in Figure 1, efforts to adapt result in withdrawals from employees' resource bank. The cumulative effect of all the changes employees experience amplifies the impact of this resource investment on employees' job attitudes and reactions to change.

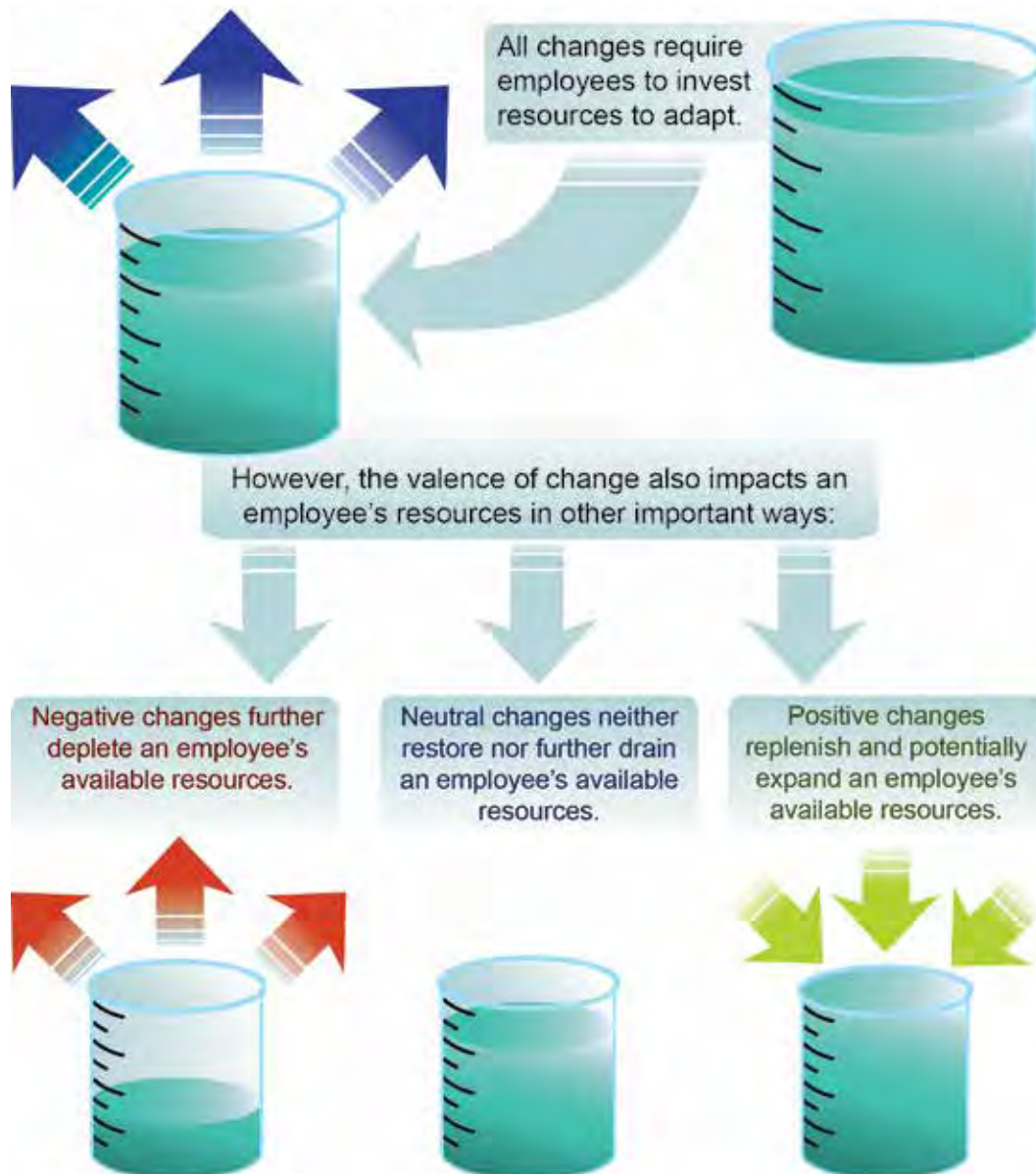
Change is inherently stressful and taxing because it drains employees' current resources.<sup>1</sup> Employees' resource banks are impacted further based on how changes alter the resources available to them on their job. For example, a positive change provides greater access to resources in the workplace. Therefore, changes perceived as positive should reduce employees' stress because their resource investment is offset by the resources gained from implementing the change. In contrast, changes perceived as negative threaten employees' available resource pool and drain resources further, making it difficult to cope with and implement change. Although the name neutral implies that the effect of these changes on employees is nil, because change itself requires an investment of resources the actual net effect of neutral change is a loss; resources are invested, but unlike positive change, no new resources become available to employees to offset the resource investments they have made.

## The Big Idea

All changes require employees to make withdrawals from their resource banks. Employees' resource banks see additional withdrawals or new deposits depending on how changes impact the resources that are available in the workplace. Employees' job attitudes and reactions to change are favorable or unfavorable depending on the extent to which employees can offset and even exceed the resources they invest when adapting to workplace changes.

Figure 1

## How Cumulative Changes Affect an Employee's Resource Bank





## Research Insights<sup>2</sup> —The Specifics of Change

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Past research has assumed that when employees experience greater amounts of change in the workplace, their perceptions of the workplace and job attitudes suffer. This assumption is based on the recognition that each change, regardless of valence, taxes the employee's resource bank, gradually diminishing it with each attempt to adapt to a new change. Our research indicates that employees' perceptions of the workplace and job attitudes suffer when the overall amount of change employees experience is considered. Employees who experienced greater amounts of workplace change in the preceding 12 months reported more change-related stress, frustration at work, intention to turnover,

change fatigue, and change cynicism. Although statistically significant, these relationships were not as strong in magnitude as one might expect. Further, our research found no significant relationship between the total change employees experienced and employees' organizational commitment, work engagement, or experience of flow (absorption and excitement).

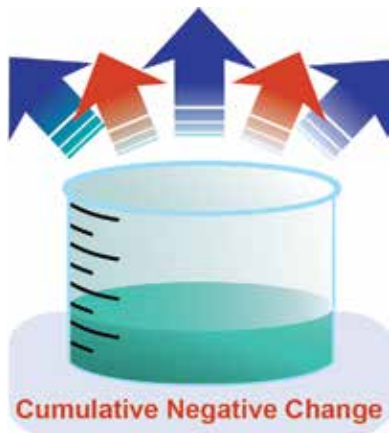
**Our findings supported the widely held belief that greater amounts of change in the workplace (in general) can negatively impact employees. However, we obtained some very interesting results when we considered the valence of change.**

### **Employees describe neutral changes in their workplace:**

“Changes in performance measures were virtually meaningless.”

“Changes in policies were made without a clear reason for change.”

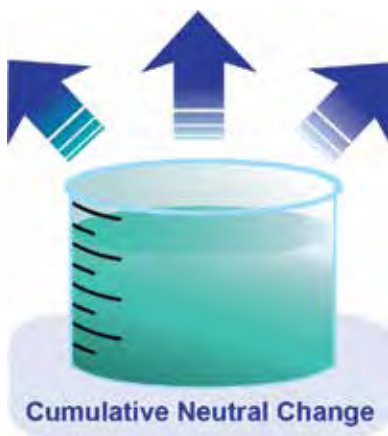
## Cumulative Negative Change



Experiencing many negative changes in the workplace is especially draining because in addition to requiring employees to invest resources to adapt, these changes decrease the resources available to employees in their job. Our research indicates employees who experience more negative change report greater change-related stress and frustration, are more likely to plan to leave their job, and report higher levels of change fatigue and cynicism. They also were less committed to their organization, less engaged in their job, and experienced lower levels of flow (absorption and excitement) in their work.

*These relationships are much stronger than those found when we considered the total amount of change employees experienced without considering the valence of that change.*

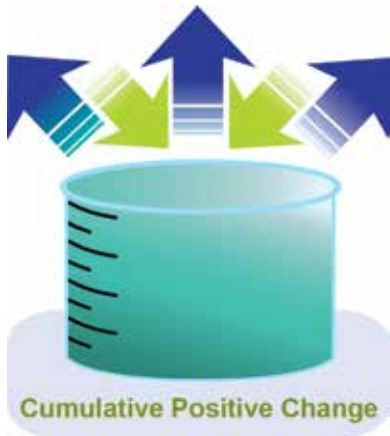
## Cumulative Neutral Change



Intuitively, it may seem that changes that are neutral would not have much impact on employees' job attitudes or reactions to change. However, because even neutral changes place demands on employees who must use their current resources to adapt, our research found that employees who experienced more neutral changes reported greater amounts of change-related stress and frustration. They also reported higher levels of change fatigue and cynicism, lower commitment to their job, and were more likely to consider leaving.

*These relationships are weaker than those found for negative change because the demands on employees from investing resources to adapt to these changes were not compounded by the actual loss of resources.*

## Cumulative Positive Change



While our research shows that greater amounts of total, negative, and neutral change are associated with many unfavorable attitudes and perceptions, many positive changes have the potential to have the opposite effect. Unlike negative changes, which threaten or result in actual loss of resources available to employees in their jobs, positive changes provide greater access to resources, which offset the resources required to adapt to change. These changes also create positive emotions, increasing their willingness to invest resources in their job and the organization. Our research found that when employees experienced more positive changes they reported less stress and frustration, were less likely to leave the organization, and reported lower levels of cynicism regarding future changes. They also reported greater commitment to the organization, engagement in their job, and experiences of flow (absorption and excitement) in their work. These positive experiences are possible because employees have resources available to invest in their organization and job.

See Table 2 for a comparison of the magnitude of relationships between total, negative, neutral, and positive cumulative change and different types of change reactions and attitudes.

Table 2

	Change Reactions and Attitudes	Cumulative Change	Cumulative Negative Change	Cumulative Neutral Change	Cumulative Positive Change
Unfavorable	Change-related stress	.18*	.48*	.14*	-.19*
	Frustration at work	.19*	.44*	.18*	-.19*
	Intention to turnover	.20*	.44*	.20*	-.18*
	Change fatigue	.34*	.51*	.30*	-.11
	Change cynicism	.18*	.45*	.20*	-.22*
Favorable	Organizational commitment	-.09	-.28*	-.13*	.18*
	Work engagement	-.02	-.39*	-.07	.24*
	Flow	-.07	-.38*	-.09	.19*

An asterisk (\*) indicates that these correlations are statistically significant. A positive relationship indicates: The more change employees experience, the more of a specific attitude they report. A negative relationship indicates: The more change employees experience, the less of a specific attitude they report.

## Employees describe negative change in their workplace:

“Extra duties that did not previously fall under my job description have been added and the workload is obviously larger but confined to the same amount of hours.”

“The workload has increased, but we have not added more people, so each employee is stretched.”

# Commonly Experienced Workplace Changes

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Employees experience a number of different changes in the workplace. Three of the studies reported here used samples from a cross-section of industries and companies. In those samples, employees reported on average of 10 changes within a 12-month period. In the fourth study, which used a sample from one organization in the entertainment industry, employees reported on average eight changes in a 12-month period. It is completely likely that employees in different industries experience different amounts of change, and this is an important direction we are examining in future research.

The findings in Table 3 are based on 761 respondents (across the four different studies) who described the changes they experienced in their organization over the preceding year. The changes are ranked from most to least commonly experienced, and the percentage of people who experienced each change is presented in the second column.

The top five most commonly reported changes were

- coworkers or team members
- the leadership of the organization
- pay
- job responsibilities
- workload

To understand whether most changes are perceived as positive, neutral, or negative and whether certain changes tended to have a particular impact on employees' jobs, we calculated the percentage of employees who reported each valence (see the last three columns). The size of the text in the column indicates whether each change tended to be seen by employees as negative, neutral, or positive.

**Each type of change was perceived as negative, neutral, and positive by at least some employees, and often the breakdown was pretty even.**

However, these findings provide some insights into whether certain changes (in general) tend to be seen as negative, neutral, or positive. **The good news is that many changes were viewed as positive by a large portion of the employees who experienced them.** For example, 59% of the employees who experienced a change in pay and 55% of employees who experienced a change in opportunities for professional development said that change was positive. Many changes were also viewed as neutral by a large portion of the employees who experienced them, whereas the only change in which more employees felt it was negative than neutral or positive was a change in their benefits.

Table 3

Change employees experienced	Percentage of employees who experienced change	Of employees who experienced the change, the percentage who reported it as:		
		Negative	Neutral	Positive
Change in . . .				
your coworkers or teammates	65%	16%	43%	35%
the leadership of your organization	53%	12%	45%	37%
your pay	53%	16%	22%	59%
your job responsibilities	49%	18%	34%	44%
your workload	46%	26%	45%	25%
your work schedule	40%	25%	42%	29%
your job activities	36%	16%	41%	39%
your opportunities for promotion	36%	16%	25%	53%
the technology and equipment you use	35%	11%	37%	47%
the structure of your organization	35%	15%	54%	27%
your opportunities for professional development	35%	17%	24%	55%
your benefits	34%	39%	35%	19%
your supervisor	34%	19%	35%	40%
your position in the organization	33%	13%	31%	48%
the regulations you must follow	32%	27%	49%	19%
the support you receive from colleagues	31%	24%	31%	41%
how your performance is evaluated	29%	22%	45%	28%
your organization's policies and procedures	26%	20%	54%	21%
the extent to which you work with others in your job	26%	14%	41%	40%
the content of your work (products and services)	25%	11%	49%	36%
the materials you use to do your job	24%	16%	48%	33%
the training you receive to do your job	23%	17%	33%	45%
the physical work environment	23%	21%	44%	30%
the mentoring you receive	23%	24%	33%	38%
the feedback you receive on your work	23%	20%	34%	41%
the mission of your organization	22%	14%	46%	31%
the marketplace in which your organization operates	22%	27%	40%	29%
the physical requirements of your job	18%	21%	49%	26%
your work location	18%	12%	42%	42%
the type of customers you serve	17%	17%	53%	26%
your organization's values	15%	24%	40%	32%
your work-related travel	13%	15%	42%	37%
the union-company relationship	10%	25%	40%	32%



We also asked employees about the size of impact that each change had when it occurred. The most impactful changes (on average) were

- physical environment (e.g., noise, lighting, temperature) of the workplace
- supervisor
- marketplace in which the organization operates
- job responsibilities
- leadership of the organization

It is clear that some changes had a greater impact on employees than others. Understanding the extent to which employees have to adapt when they experienced a change is important for anticipating which job characteristics will require additional training and support and, ultimately, for improving success rates.



## Not All Change Is Bad

Consistent with conventional wisdom and previous research, we found that, in general, greater amounts of change have a negative impact on employees. However, contrary to previous research and prevailing thinking, we showed that greater amounts of change are not uniformly bad. Considering the effects of cumulative change without considering whether changes are viewed as having a positive, neutral, or negative impact on employees' jobs is missing an important point. When employees experience greater amounts of negative or neutral change they report unfavorable reactions and attitudes, but when employees experience greater amounts of positive change, they report favorable reactions and attitudes.

Our results suggested that not all change is "bad" and that there are typically more positive than negative changes experienced in the workplace. Although

this is encouraging, it does not overshadow the need to identify the many neutral and negative changes employees experience. These changes add up and can have a negative impact on employees' job attitudes and workplace perceptions. For example, the relationships between cumulative negative change and workplace outcomes were stronger than the relationships between cumulative positive change and workplace outcomes. These findings are consistent with previous research, which suggests that it is psychologically more harmful for individuals to lose resources than it is helpful for them to gain resources (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014).

**Changes should not be undertaken for the sake of change. Changes should be implemented only if they have the potential to improve the organization and/or employees' jobs.**

# Practical Insights

Change in organizations is inevitable. Consider these insights to help leaders and employees in your organization thrive in a turbulent workplace:

**Embrace a new change paradigm.** Old models of change are built on a view of singular isolated incidents. Our research suggests that workplace change needs to be understood in its totality. Leaders must consider both the amount and valence of workplace change to understand its cumulative impact on employees.

**All change comes at a cost.** Employees need to feel that the changes they are asked to implement will have an impact on their job that is worth the resource investments they have to make to adapt. From an employee's perspective, neutral and negative changes fail to deliver value that justifies the investments they have to make to adapt to change.

**Change isn't always bad.** Most of the changes reported by employees were viewed as positive or neutral rather than negative. Leaders should not fear that employees are universally resistant to change. Employees will respond positively when they see the benefits of changes for themselves and their organization.

**Emphasize the benefits of change.** Reactions to change are largely perceptual and can be shaped through communication efforts. Leaders who stress the need for and benefits from organizational changes may help increase employees' perception that the change will be positive and worth their investment.

**Know employees' change history.** Leaders need to pay attention to the history of change in their group and the organization as a whole. They must consider how many changes have occurred and the cumulative demands these changes have placed on employees. Leaders must also consider whether employees' experiences have been positive, neutral, or negative. Until now, there was not a tool that allowed leaders to monitor the cumulative amount of change in their workplace. (See the Monitor the Change in Your Organization sidebar.)

**Use an integrated change-management approach.** Leaders must consider all of the changes occurring in their workplace. One change cannot be implemented as if it is independent from all the other changes occurring in the workplace. Leaders might carefully prioritize, sequence, and coordinate changes as well as remain cognizant of the cumulative effect of these changes on employees.

## Monitor the Change in Your Organization

Please contact Kristin Cullen-Lester ([cullenk@ccl.org](mailto:cullenk@ccl.org)) if you are interested in capturing the change history of your group or organization.

- Learn how much change has occurred in the last year and whether employees saw these changes as having a positive impact.
- Identify which types of changes have been most impactful and whether they were positive or negative.
- Diagnose negative changes and locate positive changes as examples for the future.
- Compare results to a growing normative database.

## Tell us about your changing workplace

Follow this link to contribute to our growing database. You will be asked to indicate the changes you have experienced in the last 12 months at work and to describe how those changes impacted your job.

[https://ccl.az1.qualtrics.com/SE/?SID=SV\\_gzqL1BNNCKRIZmB](https://ccl.az1.qualtrics.com/SE/?SID=SV_gzqL1BNNCKRIZmB)



## About the Research

This paper is based on research conducted by Kristin Cullen-Lester (Center for Creative Leadership), Brian Webster (Oklahoma State University), Bryan Edwards (Oklahoma State University), and Phillip Braddy (Center for Creative Leadership) to develop a measure of employees' reactions to the entirety of their changing work environment. This measure provides positive, neutral, and negative cumulative change scores that show differential relationships with employees' reactions to change and workplace attitudes. Qualitative and quantitative data were collected from four samples to develop and validate this measure.

**Pilot Sample.** Forty-six working business and MBA students (40% women) working at least 20 hours per week. The average age was 23 years ( $SD = 4.7$ ), and the average tenure at their organization was 2.2 years ( $SD = 1.6$ ).

**Sample 1.** One hundred one working adults (56% women) were recruited by upper-level business course students from a large research university. Participants worked in a variety of organizations and industries (e.g., finance, legal, government, education, retail). Most participants were Caucasian (89%) and the average age for participants was 41.9 years ( $SD = 13.9$ ).

**Sample 2.** Two hundred twenty-nine working adults (52% women) were recruited using the same procedure as Sample 1. Most participants were Caucasian (86%) and the average age for participants was 39.64 years ( $SD = 14.25$ ).

**Sample 3.** Four hundred twenty-eight managers from a large entertainment conglomerate participated in the survey. No demographic data were available from the organization, and we were not allowed to collect any demographics for research purposes.

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## Endnotes

- <sup>1</sup> The Conservation of Resources theory proposes that individuals are motivated to protect their current resources and acquire additional resources (Hobfoll, 1989). When resources are threatened or taken away individuals experience stress and are motivated to minimize their loss.
- <sup>2</sup> The correlations presented here are from Studies 2 and 3. See the About the Research section for more details.

## About the Authors

**Kristin L. Cullen-Lester, PhD**, is a senior faculty member in Research, Innovation, and Product Development at the Center for Creative Leadership (CCL®). Kristin's work focuses on improving leaders' understanding of organizational networks and the ability of organizations to facilitate collective leadership, complex collaboration, and change across organizational boundaries. She was awarded an Alfred J. Marrow New Directions in Leadership research grant to examine the impact of agile work practices on the development of team networks and a grant from the Academy of Management Organizational Change and Development division to develop a new measure of cumulative workplace change. Kristin earned her PhD in industrial/organizational psychology from Auburn University.

**Bryan D. Edwards, PhD**, is the Joe Synar chair and associate professor of management at Oklahoma State University specializing in human resource management and organizational behavior. Bryan's research focuses on training and development, performance management, and organizational change and development. His research has been funded by the National Science Foundation, Material Handling Industry of America, US Department of Defense, and other public and private agencies. Bryan received his PhD in industrial/organizational psychology from Texas A&M University and previously served on the faculty at Tulane University and Auburn University.

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