



Influences on the Continuum of Individual Responses to Change – Part 1 of a Series –

“There is nothing so stable as change.”
– Bob Dylan

The events of 2020 have served as a stark reminder of how quickly our lives can change, sometimes in dramatic ways. *Realizing* that change is constant, pervasive and exponential is not the same as personally *living through it*. As psychologist Jack Tsai noted in an APA 2020 report, “The social strife and physical distancing of 2020 have been humbling and reminded us that we are emotional beings.”

“Conditions for accelerating change have been building for years. Advancements in information technology, automation, human interconnectivity, artificial intelligence, and the network effects among them, created a new reality where change is much more rapid, continual, and ubiquitous. Covid-19 and its derivatives laid bare a ‘new normal’ of change, marked by three dimensions:

- *It’s perpetual — occurring all the time in an ongoing way.*
- *It’s pervasive — unfolding in multiple areas of life at once.*
- *It’s exponential — accelerating at an increasingly rapid rate.”*

– Aneel Chima and Ron Gutma
Harvard Business Review
October 29, 2020

Although change is inevitable, how individuals respond to change is most certainly not. We all can think of situations where two people have responded to identical changes in very different ways. A change that one person finds thrilling.... may be debilitating for another. Some relish the variety, stimulation and newness of change and may even actively seek it out. Yet others may react with dread at the mere mention of even a slight change in routine.

For example, during the COVID-19 pandemic some people found the adjustment of staying home and working virtually to be a difficult experience. Others have embraced it and never want to go back to a traditional office setting. Just as people have dramatically different preferences for music, food, hobbies and friends, we fall along a continuum in our appetites for change.

So, what contributes to the wide variations in how we each respond to change? What factors influence how individuals react when faced with change? Can we predict how individuals will respond to change? These questions are increasingly important to leaders and organizations in a world where the frequency and pace of change is increasing.

As you might guess, there are no easy answers. However, existing research does provide us with some of the pieces to this complex puzzle. The purpose of this white paper is to explore some of the individual differences that influence our unique reactions to change.

Our Role in Change



It is important to recognize that members of an organization have very different roles in change. To be successful, leaders must be able to forecast changes in the environment, anticipate the organizational responses required and then quickly and flexibly apply lessons from their past experiences to lead in new and changing situations. In fact, over the past two decades researchers have found that *learning agility* is the most important predictor of success in leadership roles (De Meuse, 2017, 2019; Harvey & De Meuse, 2021). An important role of leaders is to guide the rest of the organization through change. In fact, the word *leader* is derived from an Old English word — *lædan* — which means “to go before as a guide” (Macmillan Dictionary, 2020). In addition to

managing their own unique reaction to change, leaders must understand others’ responses to change.

However, the majority of individuals in organizations are not in formal leadership roles. They may have little or no influence over the direction of the organization, the changes that occur, or perhaps even how they perform their day-to-day work. But this certainly does not insulate them from the flow of change, be it a trickling stream or a white-water river. To survive in the changing world of today, we must *all* continually adapt to change, ideally in healthy ways.

Unfortunately, not everyone does respond to change in positive, productive ways. Frequently, the stress of change results in low engagement, high turnover and absenteeism, accidents, low quality products and services, conflict, physical and mental health issuesthe list goes on and on.

Obviously how leaders and organizations manage change plays an important role. In fact, a search on Amazon yields more than 10,000 books on change management! But, even employees in the same organization in the same department, with the same job, same change management process and same leadership can still respond very differently. Clearly given the impact of individual responses to change, understanding... and predicting them... is important!

“Light travels through space at a constant 186,281 miles per second. The laws of the universe dictate this speed with no deviation. Humans travel through life without the benefit of a fixed velocity. We move at a variable rate that fluctuates according to our capacity for assimilating new information and influences. How well we absorb the implications of change dramatically affects the rate at which we successfully manage the challenges we face, both individually and collectively.”

– Daryl Conner,
Managing at the Speed of Change

Factors that Influence Responses to Change

How change is introduced and managed within organizations is important. The existing culture and skills of leadership influence reactions to change. However, also understanding the factors that influence individual differences in reactions to change can support leaders and change agents in understanding why employees may react in certain ways. In addition, a deeper understanding of these factors can increase self-awareness and management of our own reactions. Some of the most significant influences include:

1. How our brains are wired
2. Previous experiences
3. Beliefs about the situation
4. Fairness expectations
5. Our personality
6. What we value
7. Beliefs we have about ourselves
8. Resilience and coping strategies

It is important to keep in mind that these influences are not independent but are connected in unique and complex ways. But it all starts with our neurological “wiring.”

1. How Our Brains are Wired

At least part of the variation in responses to change can be attributed to how we are each uniquely neurologically wired. The limbic portion of our brain is “programmed” to respond to a perceived threat by trying to avoid it or fight it – the classic “fight or flight” response. Appropriate responses to danger have played a major role in our survival as a species.

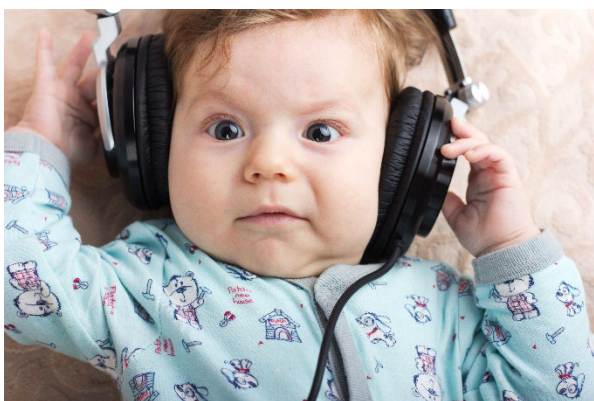
However, the key variable is *perception of threat*. We each have different sensitivity and tolerance to different types of threat, particularly psychological threat. As explained by Ruyle (2021), “the workplace is teeming with potential psychological threats that can disengage employees and create all manner of unpredictable and undesired approach/avoidance behaviors.”

Rock and Cox (2012) classify threats into two threats to our sense of control – Autonomy and Certainty, and three social threats – Status, Relationships, and Fairness. (The SCARF model). Individual responses to change are influenced by the importance we attach to each of these five SCARF factors and our sensitivity to signals of them.

Sources of Threat – David Rock’s SCARF Model (2008)	
Status	▪ Our importance or position relative to others in a community or group
Certainty	▪ Ability to accurately predict the future allowing greater certainty in choices and actions
Autonomy	▪ Having choices and the ability to exert control over our environment
Relatedness	▪ Connection and belonging (i.e., being inside or outside a group we value)
Fairness	▪ Just, impartial treatment without favoritism or discrimination

2. Our Previous Experiences

A newborn starts life with limbic system circuitry that supports the rudimentary emotions of fear, anger, alarm, sadness, satisfaction, pleasure, hunger, and thirst. However, the limbic system continues to change based on life experiences, particularly through childhood, adolescence and early adulthood. Given our life experiences are as distinct as our finger prints, it is not surprising that we all respond differently to change.



Our past experiences affect our neural wiring, which in turn influences the types of changes that trigger approach or avoidance responses. For example, a significant amount of research indicates that adverse childhood experiences contribute significantly to physical, mental and socioeconomic well-being in later life (Bellis et al., 2019). Early adverse experiences disrupt the ability to feel safe in exploring the world and the development of emotional coping strategies.

Early life experiences also play an important role in shaping our personality, which (as discussed later in this document) is also a determinant of our reactions to change. For example, a robust relationship exists between childhood experiences and the personality dimensions of neuroticism and openness to experience, and to some extent with conscientiousness and extraversion (Fletcher & Schurer, 2017).

In addition, our memories about earlier life experiences influence our predictions about the future (Arnold et al., 2011). We make sense of situations through the filter of our past experiences, and negative experiences are especially salient (Smollan, 2006). If someone has had multiple positive or negative experiences with change in the past, he or she is more likely to expect the same in the future.

3. Beliefs about the Situation

A belief is something that is accepted, considered to be true, or held as an opinion (Fishbein & Ajzen, 2010). Beliefs are a potent factor in reactions to change. For example, consider how two employees are likely to respond when their organization announces a reduction in employee benefits. Employee 1 believes that reducing employee benefits is necessary for the business to remain competitive so she can keep her job. In contrast, Employee 2 believes that reducing employee benefits is just another way to increase profits and bonuses for top leadership.

Given the likely differences in emotional reactions and behaviors of these two employees, it's not surprising that efforts to influence employee beliefs is a huge component of most change management programs. Some believe that change – like riding rollercoaster – is exhilarating and harmless, while others may find it terrifying and risky!



“We form our beliefs for a variety of subjective, emotional and psychological reasons in the context of environments created by family, friends, colleagues, culture, and society at large. After forming our beliefs, we then defend, justify, and rationalize them with a host of intellectual reasons, cogent arguments, and rational explanations. Beliefs come first; explanations for beliefs follow.”

– Michael Shermer,
The Believing Brain

Achilles Armenakis and his colleagues (2007) identified five beliefs that are especially important to positive reactions to change. These are outlined in the table below.

Belief	Definition
Discrepancy	<ul style="list-style-type: none"> There is a need to change from the current state to a future state based on external factors such as the social, economic, political, and competitive environments
Appropriateness	<ul style="list-style-type: none"> A specific change is necessary to reach the desired future state
Efficacy	<ul style="list-style-type: none"> The collective capability exists to execute the courses of action needed to implement of the proposed change
Principal support	<ul style="list-style-type: none"> There is support from key individuals who can influence others to accept change
Valence	<ul style="list-style-type: none"> The change will result in benefits that are positive for the organization, their fellow employees, or for them personally.

Adapted from: Armenakis et al (2007)

Virtually everyone considers themselves to be rational when evaluating information and forming beliefs about what is and what is not true. Unfortunately, we are rarely as objective as we like to think in analyzing the reality of our perceptions, including those about change.

We filter information through cognitive biases that distort our perceptions to fit what we believe. Just a few common biases are the following: 1) anchoring bias where we rely too heavily on one piece of information when making decisions; 2) authority bias where we rely on the opinions of someone we consider an authority; and 3) confirmation bias where we seek out information that confirms our existing belief and ignore or reinterpret disconfirming evidence.

Results of research by Bovey & Hede (2001a) explored how cognitive distortions impact responses to change. They found that certain irrational beliefs were most strongly related to change resistance (see box to the right).

These irrational beliefs underscore the importance of an especially important set of beliefs – those about ourselves – that impact reactions to change. These will be discussed in a later section.

Irrational Beliefs About Change

- Others should be blamed for treatment perceived as unfair or unkind
- Emotional distress comes from external factors and cannot be controlled
- Life's difficulties are easier to avoid than be responded to with self-responsibility or discipline
- Happiness can be achieved through inaction and a passive existence

(Adapted from Bovey & Hede, 2001a)

4. Fairness Expectations

A specific belief that is highly salient to reactions to change is related to fair treatment. People differ in their degree of “justice sensitivity” or “victim sensitivity.” Studies have shown that injustice sensitivity (a) can be predicted based on neuroanatomical differences, (b) varies enormously among individuals, and (c) is relatively stable across time within a person (e.g., Baumgartner et al., 2016). Other researchers have found that both direct and observed victimization experiences shape our expectations about the trustworthiness of others (Gollwitzer et al., 2015).



Justice and victim-sensitive individuals are hypersensitive to cues about unfairness or the potential for exploitation (Schmitt, & Dörfel, 1999) which influences how they are likely to respond to change. Simona Maltese and her colleagues (2016) found that victim-sensitive persons have a disproportionate tendency to form expectancies that others will treat them unfairly, which in turn causes them to withdraw cooperation in uncertain situations. Unfortunately – but not surprising given life experiences – research has demonstrated that minorities are more likely to expect unfair treatment (Ritter et al., 2005). We all are

especially sensitive to fairness violations when they impact our in-group and those who are similar to us (Mendoza, Lane & Amodio, 2014).

5. Our Personality

Our personality is made up of our characteristic patterns of thinking, feeling, and behaving and is relatively stable once we become adults. Our personalities have a genetic basis, but likewise are heavily influenced by our environment and life experiences. Personality is an amalgamation of the topics already discussed...our neuroanatomy, our experiences, beliefs, and expectations.

Psychologists have begun to identify some of the personality traits that influence how resistant or open to change individuals may be. The following table summarizes some of their research findings. However, it is important to keep in mind that research on this topic is still far from conclusive. In addition, it is unlikely that anyone will possess all of the characteristics related to accepting or resisting change. And the importance of these characteristics may be different for organizational leaders than for followers.

Even less is known about the interactions among various traits. For illustration, how does someone who is highly optimistic with a strong preference for routine respond to change? What about someone who seeks out new experiences but is emotionally volatile? Research exploring the interplay of various personality characteristics could help us more accurately predict reactions to change.

Personality Dimensions	Propensity To Oppose or Resist Change	Propensity To Accept or Adapt to Change
Negative vs. Positive Outlook	<ul style="list-style-type: none"> Negative affect, pessimist, cynical 	<ul style="list-style-type: none"> Positive affect, optimistic, trusting
Preference for Routine vs. New Experiences	<ul style="list-style-type: none"> Avoid risky situations; prefer routine and stability 	<ul style="list-style-type: none"> Lower aversion to risk; seek new experiences; bored with routine
Need for Control vs Tolerance for Ambiguity	<ul style="list-style-type: none"> Ambiguity viewed as threatening; high need to control environment 	<ul style="list-style-type: none"> Comfortable with ambiguity; low need to control
Cognitive Rigidity vs. Flexibility	<ul style="list-style-type: none"> Dogmatic in view; closed-minded, stable belief structure 	<ul style="list-style-type: none"> Willing to consider alternative perspectives, flexible in beliefs
High vs. Low Emotional Reactivity	<ul style="list-style-type: none"> Emotionally volatile and easily stressed 	<ul style="list-style-type: none"> Emotionally even-keeled and stable
Low vs High Conscientiousness	<ul style="list-style-type: none"> Impetuous, unreliable doing what is expected; lower initiative and need to achieve 	<ul style="list-style-type: none"> Disciplined and dependable in doing what is expected; strives to achieve

Sources: Erwin & Garman, 2010; Judge et al., 1999; Oreg, 2003; Oreg et al., 2011

6. What We Value

Change may threaten loss of the things that matter most to us. At the same time, change can offer the promise to gain, or gain more of things we value. Consider an organizational change that creates uncertainty. Some may perceive it as creating additional career paths or the chance to change their schedule in positive ways. Others may place greater importance on having a secure paycheck and benefits to care for their families. Some may fear losing valued colleagues. Yet others may view an organizational change as the chance to make new friends. A comprehensive literature review on sources of resistance to change indicated that “deep rooted values” is the most important source of resistance (Pardo & Martinez-Fuentes, 2003).

In considering how an individual may respond to change, it is critical to consider how a specific organizational change may eliminate or reduce, add, or increase what is important to each individual. And depending on the importance of the value, even uncertainty about the potential for loss or gain can lead to a variety of reactions.



The research literature on what is valued by employees is vast and complex. There is no commonly agreed upon framework for what matters most. Moreover, what each individual values is influenced by a multitude of factors including age, profession, industry, culture, religious upbringing, and personality. The following table summarizes some of the losses or gains from change that may be most salient.

What Is Valued		
Nature of Work	<ul style="list-style-type: none"> ▪ Being creative ▪ Opportunity to achieve ▪ Supporting an important cause/mission ▪ Contributing to quality products or services 	<ul style="list-style-type: none"> ▪ Stimulating or routine ▪ Autonomy ▪ Working conditions ▪ Opportunities to have fun ▪ Contributing to science ▪ Helping others
Relationships & Interaction	<ul style="list-style-type: none"> ▪ With manager/leaders ▪ With team members 	<ul style="list-style-type: none"> ▪ Degree of interaction with others
Fair Treatment	<ul style="list-style-type: none"> ▪ Of self 	<ul style="list-style-type: none"> ▪ Of group
Lifestyle & Work-life Balance	<ul style="list-style-type: none"> ▪ Schedule ▪ Commute/travel ▪ Work location 	<ul style="list-style-type: none"> ▪ Time off ▪ Flexibility
Status & Growth	<ul style="list-style-type: none"> ▪ Learning opportunities ▪ Promotion opportunities ▪ Career paths 	<ul style="list-style-type: none"> ▪ Ability to set direction and lead others ▪ Scope of responsibility ▪ Recognition
Security & Financial	<ul style="list-style-type: none"> ▪ Steady pay ▪ Health care and other benefits 	<ul style="list-style-type: none"> ▪ Predictable work environment ▪ Job security

7. Beliefs We Have About Ourselves

The beliefs that we have about ourselves – our core self-evaluations – play a central role in how we respond to change. There is considerable research supporting the importance of our self-beliefs in dealing with change, including acceptance and adjustment (Judge et al., 1999; Wanberg & Banas, 2000), readiness and engagement (Cunningham et al., 2010; Judge et al., 1999, 2000; Oreg et al., 2011), and use of adaptive coping strategies.

Not only do individuals with positive self-beliefs respond more effectively to change, they are more likely to be successful in organizations overall (Judge et al., 1999). The following summarizes the core beliefs that appear to be most important to successfully navigating change.

Core Self-Beliefs

- I have control over outcomes in my life and am not just a victim of circumstances (i.e., internal locus of control)
- I am worthy and valuable as a person and have confidence in myself (i.e., self-esteem)
- I have the ability to be successful in taking action and achieving positive outcomes (i.e., self-efficacy)

Self-efficacy is the belief in one's capabilities to organize and execute the sources of action required to manage prospective situations.

– Albert Bandura



8. Resilience and Coping Strategies

Change often is experienced as challenging and stressful. How individuals respond to change is influenced by their resilience and the coping strategies that they are able to deploy. For example, Shin et al. (2012) found a strong relationship



between employees' psychological resilience and commitment to organizational change.

Resilience is about not just surviving, but positively adapting and even thriving when faced with challenging situations. Coping strategies are a key to resilience and are defined as "cognitive and behavioral efforts to manage specific external or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141).

Researchers have found that those individuals who use adaptive versus maladaptive coping mechanisms are less likely to resist organizational change. (e.g., Bovey & Hede 2001a, 2001b; Oreg et al., 2011). Individuals who have developed a tool kit of healthy coping strategies are better equipped to deal with change in productive ways (Callan, 1994; Callan et al., 1993; Holt et al., 2007). The following are commonly used categories for of adaptive coping strategies.

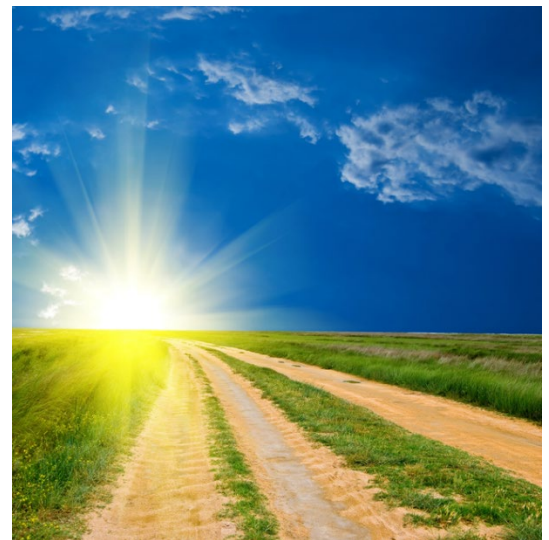
Adaptive Coping Strategies	
Problem-focused	▪ Gathering information; evaluating solutions; taking control
Cognitive	▪ Labeling and reframing the problem, reevaluating beliefs about the situation; using humor
Emotion-focused	▪ Managing emotions through distraction, venting, relaxation techniques
Support-seeking	▪ Gaining support from friends, family, and trusted advisors
Meaning-making	▪ Making sense of events; considering them in broader context of life

Based on Lazarus & Folkman (1984)

Summary

Clearly, our unique responses to change are complex and influenced by a wide range of factors. They include:

- Our brain's neurological response to perceptions of threat
- Our past experiences with change and memories of them
- Both our rational and irrational beliefs about what is true about change
- Our sensitivity to justice and expectations about being exploited
- The complex pattern of thoughts, feelings, and behaviors that we call "personality"
- What we value and care about most be it how we work, where we work, who we work with, or our paycheck
- The beliefs we have about ourselves and our ability to successfully navigate change
- Our resilience and strategies for positively adapting to change



For some individuals, the road to change may seem jarring and filled with risks. Others may keep their focus on the sunny horizon and enjoy the adventure. However, we all can be confident that change is inevitable.

Change is the law of life. And those who look only to the past or present are certain to miss the future.

– John F. Kennedy

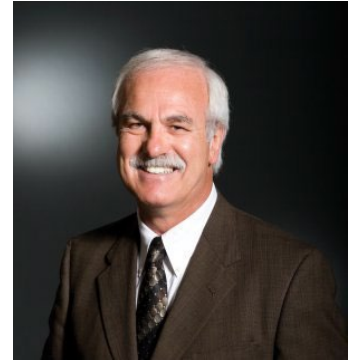
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Next Up in This Series:

Part II: Using the Continuum™ Assessment to Measure Reactions to Change

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