## A TEST OF SITUATIONAL STRENGTH ON ADAPTABILITY AND IMPLICATIONS FOR PRE-EMPLOYMENT ASSESSMENTS

By

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#### ABSTRACT

### A TEST OF SITUATIONAL STRENGTH ON ADAPTABILITY AND IMPLICATIONS FOR PRE-EMPLOYMENT ASSESSMENTS

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This laboratory study tested the utility of using situational strength and trait-relevant cues in an assessment context. Situational strength refers to cues provided by the environment about the desirability of potential behaviors, and trait-relevant cues are those that activate or prompt certain trait-relevant behaviors (for example, a gun activating more aggressive behavior). A sample of 215 students was assessed for five dimensions of adaptive performance using in-basket exercises which contained a situational strength manipulation. There were three levels of this manipulation: weak, moderate, and strong situational strength. This study examined whether those high in adaptability exhibited higher levels of adaptive performance, which was assessed using situational judgment items. This study also tested whether those high in adaptability exhibited more adaptive performance in moderate strength situations than those low in adaptability. There was partial support for both sets of hypotheses: those higher in adaptability did exhibit more adaptive performance and did show more adaptive performance at the moderate (as opposed to weak or strong) level of strength. However, the results did not extend to all dimensions of adaptive performance, and were not all statistically significant. Implications for use and measurement of situational strength in selection, use of contextualization in assessment, and conceptualization and measurement of adaptive performance are discussed as well as limitations of the study.

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#### **INTRODUCTION**

In today's modern organizational environment employees are relocated to offices around the world, teams band and disband in the blink of an eye, and the pace of work is faster than ever. Organizations are now structured to be malleable so that processes and practices can be easily altered to fit current demands (Fugate & Kinicki, 2008). With this new malleability comes a pressing need for adaptive employees who can interpret uncertain situations and succeed despite the lack of structure. Adaptability is defined generally as "change so something is better able to function or is better suited for a purpose" (Merriam-Webster's online dictionary, n.d.). A large collection of researchers are exploring this topic in the workplace, looking for ways to increase adaptive performance of employees through training, leadership, modifying the organizational context, and other means (Bell & Kozlowski, 2008; Kozlowski, Gully, Brown, Salas, Smith, & Nason, 2001; Griffin, Parker, & Mason, 2010; Shoss, Witt, & Vera, 2012; Yukl & Mahsud, 2010).

There has also been a lot of attention on adaptability as an individual difference (Burch, Pavelis, & Port, 2008; Caldwell & O'Reilly, 1983; Georgsdottir & Getz, 2004; Griffin & Hesketh, 2004; LePine, Colquitt, & Erez, 2000; Mumford, Baughman, Threlfall, Uhlman, & Costanza, 1993; Ployhart & Bliese, 2006). Individual adaptability is described as "ability, skill, disposition, willingness, and/or motivation, to change or fit different task, social, and environment features" (Ployhart & Bliese, 2006, p. 13). Adaptability is especially relevant for hiring managers who aim to acquire candidates for fast-paced jobs, such as those in the technology sector, medical fields, and service industry. Hiring managers may want to select candidates who already exhibit higher levels of adaptability instead of solely relying on training to get employees to the desired level. This requires pre-employment assessments that are able to

discern between adaptable workers and less adaptable workers. While pre-employment adaptability assessments help organizations understand the underlying characteristics of candidates, they often ignore the fact that adaptability is dependent upon a work context. Researchers know from decades of study that we must understand both the person and his or her situation to accurately predict behavior (Flesson, 2004; Magnusson & Endler, 1977), and predicting behavior is often the goal in a selection context. So while there are adaptability, proactivity, and even cognitive flexibility measures available (Bateman & Crant, 1993; Dennis & Vander Wal, 2010; Fugate & Knicki, 2008; Pulakos et al., 2002; Ployhart & Bliese, 2006) they do not take specific organizational situations into account (Hough & Oswald, 2008; Meyer & Dalal, 2009), and this makes them less able to predict behavior than they could if a more thorough approach was used.

The other weakness of current adaptability measures is the high reliance on self-report. This reliance is troublesome due to the nebulous nature of adaptability which makes it difficult to grasp conceptually. Adaptability by definition requires a person to change in an unforeseen way. Therefore in order for a candidate to self-rate him or herself, he or she must understand the spectrum of what *can* be done to adopt change, and then assess how well he or she did personally. This not only requires personal insight and honesty, but it also assumes that the candidate understands what an effective adapter would do in any given situation. For example, if someone asked a candidate whether she could readily change her plans when something unexpected happens, she would need to recognize what a changing situation looks like AND understand if she changed her plans as readily and effectively as she could have. She may strongly endorse an item asking about her level of flexibility not understanding that a lot more could have been done to adapt to the changing environment.

To reiterate, the current adaptability measures miss vital pieces of the puzzle when it comes to predicting motivation and behavior. Not only do they neglect organizational context, an important part of understanding work behavior, but they rely on a reporting method that is subject to bias and threats to validity (Donaldson & Grant-Vallone, 2002; Podsakoff & Organ, 1986; Spector, 1994).

My goal in this study is to explain the need for an individual adaptability selection tool that integrates strength of the situation in predicting future work behaviors, and then test this idea to see if different levels of adaptability can be distinguished. Several of the current preemployment adaptability assessments in use are validated, usually through a construct- or criterion-related validation. However, existing measures often do not include organizational context and the ones that do ignore the way that specific situations can influence behavior. I aim to integrate relevant situational characteristics to better parse out the differences between candidates who would adapt well in the organization and those who would not. With the completion of this study, I also hope to contribute to the understanding of a future adaptability measure that uses more objective criteria for success than self-reported adaptability. By doing so, I aim to get a more accurate statement of what candidates are and are not able to do instead of relying on a candidate's impressions or aspirations of being part of a flexible organization. I believe that with the testing of this idea, researchers and hiring managers in organizations will be a step closer to having an effective assessment that provides job-relevant and objective information about a candidate's level of individual adaptability.

I begin by reviewing the person-situation debate and underscoring the importance of using both to understand and predict behavior. I then review current adaptability research, partitioning the current literature by the three primary ways adaptability has been studied up to

this point: as a set of performance behaviors (Pulakos et al., 2000), as a process (Burke, Stagl, Salas, Pierce, & Kendall, 2006), and as an individual difference construct (Ployhart & Bliese, 2006). Because I am most interested in adaptability as an individual difference construct, I take a more critical lens to the existing research to show how my study will advance understanding of individual adaptability. I then conceptualize a continuum of adaptability by drawing on previous depictions of different types of adapters (Bateman & Crant, 1993; Georgsdottir & Getz, 2004; Griffin & Hesketh, 2003; Huang, Ryan, Zabel, & Palmer, 2014; Ployhart & Bliese, 2006). High adapters are those who recognize signs of change in an organization and have both the willingness and the ability to adapt to this change before it is required. Low adapters are more passive, and do not possess as strong of a desire and/or the skills needed to adapt to organizational change before it becomes a necessity. This continuum will later be used to make specific predictions about behavior in the experimental portion of the study. After explicating the range of adaptability that will be used in this study, I move to the situational strength literature. I review the ways that situations have been looked at in the past, highlighting the fact that situations are often understood by taking the person perspective into account- this means that researchers often look at how the situation is interpreted by the people in it, instead of just analyzed for its objective characteristics. I then introduce the idea of situational strength, first explaining that situational strength refers to aspects of a situation that press people to behave in certain ways, and then summarizing two frameworks of situational strength that have been used previously (Marshall & Brown, 2006; Meyer, Dalal, & Hermida, 2010). I conclude by explaining how they will be applied in this study to understand candidates' relative levels of adaptability.

#### THE HISTORY OF THE PERSON-SITUATION INTERACTION

Researchers nowadays frequently consider the dual roles personality and context play in shaping behavior and perception of the world; however, this was not always the case. Before the 1970s, there was a strong positioning on either side of the debate: one either cared about the effect of personality or the effect of the situation. In order to understand where we are today, I take a look at the historical focus of two fields of psychology – social and personality – and their contribution to the current way of thinking about the person-situation interaction.

Social psychology aims to find "causal explanation[s] for why people experience the world as they do and act within it" (Stainton Rogers, 2011, p. 6). Much of the research social psychologists do focuses on how the environment and the actors in it influences our thoughts, feelings, and behavior (Ross & Nisbitt, 1991). The importance of the environment can be seen in many of social psychology's most prominent theories and experiments. The fundamental attribution theory posits that when humans observe others, we often incorrectly attribute outcomes to the inner workings of a person instead of to the environment (Harvey, Town, & Yarkin, 1981). A relatable example is watching a person slip in a store and assuming that he or she is clumsy instead of figuring that the ground was wet or slippery. The Milgram experiment is another example of using the situation to influence behavior; in the study researchers set up a "strong" situation, a concept that will be discussed later, and consequently got a very standardized set of responses from participants (Milgram, 1963).

While social psychologists study aspects of our environment, including the people around us, personality psychology has historically taken a different approach. Personality researchers hold the idea that individual differences in feelings, thoughts, and behaviors are responsible for

behavior (Johnson, 1997). This means people have stable traits and tendencies which shape behavior across situations and while there is variability, a person's trait composition is a good predictor of how he or she will act. Because social psychologists and personality psychologists sometimes have alternate explanations for the same behavior, tension rose between these fields (Lucas & Donnellan, 2009).

Although the debate played out in the 1920s and 1930s, Walter Mischel pushed these tensions to a breaking point when he published an influential book that offered evidence for the limited utility of personality traits, and pointed instead to the prominent effect the environment has on behavior (Mischel, 1968). Although Mischel issued later clarifications on this book that advocated for an interactionist approach (Mischel, 1999; Mischel, 2004), the perceived validity of personality psychology suffered. The field retreated to form its arguments against a claim that was so damaging to its reputation (Endler & Parker, 1992; Roberts, 2009). It experienced a resurgence in the late 1970s when the debate was "resolved" through an interactionist approach that embraced the importance of both personality and the environment in understanding human behavior (Flesson, 2004; Magnusson & Endler, 1977; Mischel & Peake, 1983). Researchers gained a shared understanding that one field cannot exist without the other, stopped refuting the existence of traits, and moved toward "specify[ing] their nature with increasing precision in different situations" (Ten Berge & De Raad, 1999, p. 354).

There is now a large body of literature examining the contribution individual traits *and* the environment make to explaining behavior (Pryor, LaVite, & Stoller, 1993; Tett & Burnett, 2003; Trevino, 1986). Following that idea, this study aims to use characteristics of the situation in influencing people with different personalities to *show* those personalities through their behavior. While there is agreement in many fields that the person and the situation are important,

pre-employment adaptability assessments have not fully captured this duality. Current assessment items make passing reference to the organizational context such as "I see connections between seemingly unrelated information" (Ployhart & Bliese, 2006, p. 37) or "I stay abreast of developments in my industry" (Fugate & Kinicki, 2008, p. 512). This leaves a large amount of interpretation up to the candidate. Hiring managers have little idea if the candidate is actually better than the average population at connecting unrelated information, what the candidate's interpretation of "current knowledge" is, or how well the candidate will perform in the specific organization to which he or she is applying. As discussed earlier, adaptability is especially problematic because it is inherently hard to grasp. It then becomes important to provide more contextual information to assessment takers in hopes that a stronger incorporation of the situation side of the person-situation interaction will allow for better prediction of future performance.

#### **OVERVIEW OF ADAPTABILITY**

There is a plethora of research on adaptability, but little standardization on how adaptability is conceptualized or defined (Baard, Rench, & Kozlowski, 2013). Researchers in different subfields of organizational psychology, as well as other fields completely, conceptualize adaptability in a way that is useful for their individual area of study. Selection researchers view adaptability as a trait because it means employees can be chosen based on their pre-existing levels of adaptability (LePine et al., 2000). Training researchers see adaptability as skills and knowledge that a person can be trained to apply to a specific situation (Smith, Ford, & Kozlowski, 1997). Creativity researchers see adaptability as a process that is vital to a creative individual's success (Feist, 1998; Meneely & Portillo, 2005).

This study is focused on adaptability in a selection context. I am most interested in adaptability as an individual difference, but also as an adaptive behavior when it comes to predicting outcomes. There are many ways to partition the research, but here I examine adaptability in three ways: as a set of performance behaviors, as a process, and as an individual difference construct. In the following review, I focus primarily on adaptability as an individual difference and a performance behavior because they are the most pertinent to the research questions, but include previous research on adaptability as a process to expose another way that adaptability is often conceptualized.

### Adaptive performance

Adaptive performance is defined as "behaviors demonstrating the ability to cope with change and to transfer learning from one task to another as job demands vary" (Allworth & Hesketh, 1999, p. 98). The first conceptualization of adaptive performance positioned it as an

addition to the two performance domains that were accepted at that time, task performance and contextual performance (Borman & Motowildo, 1993). In an early endeavor to define the criterion space of this new performance domain, Pulakos and colleagues created a typology with the goal of understanding the job performance behaviors that make up adaptive performance (Pulakos, Arad, Donovan, & Plamondon, 2000).

In order to create the typology, critical incidents were generated from employees in a variety of jobs. A content analysis of the incidents was conducted by subject matter experts and in conjunction with guidance from the literature, eight dimensions of adaptive job performance were identified. The dimensions were handling emergencies or crisis situations; handling work stress; solving problems creatively; dealing with uncertain and unpredictable work situations; learning work tasks, technologies, and procedures; demonstrating interpersonal adaptability; demonstrating cultural adaptability; and demonstrating physically oriented adaptability. With a new criterion space came the need for unique tools to measure this space, so the researchers created the Job Adaptability Inventory (JAI) which is a set of behavioral items that ask about adaptive work behaviors. While this was a rigorous effort at determining the multiple dimensions of adaptive performance, there has been no additional support for the eight dimensions (Griffin & Hesketh, 2003; Pulakos et al., 2002).

In a later conceptualization aimed at parsimony, adaptive performance was partitioned into three types of behaviors: proactive, reactive, and tolerant (Griffin & Hesketh, 2003). Proactive behaviors are initiated by a person, and have a positive impact on the environment. Reactive behaviors occur when one changes him or herself to suit a new environment. Lastly, tolerant behaviors are when a person continues the current set of behaviors despite a changing environment (Griffin & Hesketh, 2003). The figure below illustrates how 7 of Pulakos and colleagues' dimensions were subsumed into these three behavioral groupings.



Figure 1. Griffin and Hesketh (2003) adaptive behavior dimensions.

The white boxes indicate groupings from the 2003 paper, and the gray boxes indicate how Pulakos and colleagues' (2000) dimensions were subsumed into three higher dimensions. Physical ability was not included because it was not relevant to the organizations being studied.

The Minnesota Theory of Work Adjustment (TWA) was used in this study to hypothesize how seven of Pulakos' original eight adaptive behavior dimensions would fall into the three new categories. While the TWA is described, there is no direct explanation for how the theory guides the placement of the seven adaptive performance dimensions into the three new categories.

Additionally, Griffin and Hesketh's conceptualizations do not always seem to line up with Pulakos and colleagues' original definitions of the eight adaptive performance dimensions. Pulakos' "dealing with uncertain and unpredictable work situations" is described as changing gears easily, adjusting plans, goals and priorities to deal with changing situations, and taking effective action without knowing the whole picture. This sounds like it belongs in the reactive dimension (changes him or herself to suit a new environment), yet it is defined as a tolerant behavior (continues the current set of behaviors despite a changing environment).

In another example the interpersonal adaptability dimension, which describes one's ability to be open-minded and flexible when considering other's viewpoints and interacting with them, is categorized reactive. Yet it is possible that an employee could plan to interact with others with an open mindset and the intention of developing effective relationships with different types of people- an arguably proactive approach. It is difficult to group specific behaviors, such as talking to diverse people or interacting with people from different backgrounds, as proactive, reactive, or tolerant behaviors because people may take varying approaches due to individual differences.

Griffin and Hesketh's model contributes to the idea that adaptive performance is multidimensional and that some behaviors initiate change into the environment while others are just a reaction to change. However, the distribution of Pulakos' original dimensions as proactive, reactive, and tolerant behaviors does not always hold conceptually.

While adaptive performance was being studied, the role of the environment in shaping these behaviors was just beginning to be considered. Griffin and Hesketh used job complexity and management support as predictors of adaptive performance (2003). A short while later another study found management support and organizational vision to be predictors of adaptive performance (Zacarro & Banks, 2004). One study, which took a multi-level approach to model proactive, adaptive, and proficient behaviors, incorporated the environment by using work roles (Griffin, Neal, & Parker, 2007). The assumption here was that adaptive and proactive role behavior only occurs in uncertain situations where work roles are not formalized. Proficiency

behaviors, on the other hand, occur in the context of formalized work roles. A later study included organizational politics in examining when adaptive performance can contribute to task performance (Shoss et al., 2012). In all of these studies, existing aspects of the environment were taken into consideration to see how they affect adaptive performance. While the situational constructs included here are by no means an exhaustive list, these findings offer support for the idea that the environment can affect organizational outcomes like adaptive performance. Continued work on what affects adaptive performance can hopefully be used to further improve prediction of some of these behaviors.

Most recently, adaptive performance was studied using an interesting variation of the task-change paradigm. This paradigm is one of the most common methods used to look at adaptive performance (Chen, Thomas, & Wallace, 2005; Johnson et al., 2006; Kozlowski et al., 2001; LePine, 2003; 2005; LePine et al., 2000). In the method an individual or team is asked to engage in a task, usually in the form of a computer simulation or game. Once the individual or team is familiar with the task and has worked out a strategy that leads to success, the strategy changes (often to become more complex). The individual or team must adapt his or her behavior in order to continue to perform well.

In some cases the computer program gives results of adaptive performance and in other cases, raters use a scale to determine how adaptively the individual or team performed. In either case it is difficult to isolate adaptive performance from task performance or previous knowledge (Lang & Bliese, 2009). For this reason, *transition adaptation* and *reacquisition adaptation* were conceptualized. *Transition adaptation* is the degree to which routines and expertise from the original task are transferred to the new task. *Reacquisition adaptation* is the systematic learning behavior that allows one to recover from performance loss after the change to the new task (Lang

& Bliese, 2009). In addition to examining the relationship between adaptive performance and general mental ability (and finding null and negative relationships between the two), this study represents a further breakdown of adaptive performance in order to understand its working mechanisms.

Adaptive performance is an excellent criterion for individuals, teams, and organizationsit is extremely relevant in today's changing world. Researchers will likely continue to map the set of behaviors associated with adaptive performance and provide empirical evidence for the use of adaptive performance as a performance domain independent from task or contextual performance (Borman & Motowildo, 1993). In some studies, individual adaptability has been the predictor and adaptive performance has been the criterion (Griffin & Hesketh, 2003; Pulakos et al., 2002). Given that adaptive performance often captures performance behaviors that are not necessarily found in the other two performance domains, such as changing gears in response to unpredictable events or keeping knowledge and skills current, this seems to be a useful and logical mapping. Adaptive performance will be used in this study, and will be covered more in detail at the end of the section.

### Adaptability as a process

Although used less frequently, adaptability as also been conceptualized as a process. The process approach looks at adaptation as "iterative cycles of process mechanisms that are reciprocally linked to performance outcomes that individuals and teams exhibit following a task change" (Baard et al., 2014, p. 31). Most of the work in this area is theoretical with the goal of optimizing adaptability in dynamic environments (Burke et al., 2006; Kozlowski & Bell, 2008). Burke and colleagues conceptualize four stages in the team adaptive cycle: situation assessment,

plan formulation, plan execution, and team learning (Burke et al., 2006). Each of these phases is said to have its own set of processes that drive performances which creates emergent states that continue to drive later phases of the adaptive cycle (Baard et al., 2014; Rosen, Bedwell, Wildman, Fritzsche, Salas, & Burke, 2011). The implications of adaptive processes will be especially salient as the pace of work and change quickens. This research is not directly relevant to individual adaptability assessment because hiring agents often do not have the chance to observe candidates for long period of time to understand the processes underlying their behavior. So while it is an interesting area of work, adaptability as a process does not play a role in this study.

#### Adaptability as an individual difference

Another way of conceptualizing adaptability is an individual difference. Individual differences are "stable internal factors that make one person's behavior consistent from one time to another, and different than behavior other people would manifest in comparable situations" (Child, 1968, p. 83). Selection researchers and practitioners benefit when adaptability is conceptualized as an individual difference; it means that organizations can select candidates based on their pre-existing levels of adaptability, instead of relying solely on training for them to reach the necessary level required for the job. Selection researchers are then able to create assessments with adaptability as the predictor, and organizations save time and resources by selecting employees who will fulfill the job requirements early in their tenure. Adaptability, and constructs like adaptability such as proactive personality and dispositional employability, are linked to a number of other positive outcomes such as job and career satisfaction, strong commitment to goals, organizational citizenship behaviors, affective commitment to organizational change, and the establishment of strong supervisor relationships (Campbell, 2000;

Li, Lang, & Crant, 2010; Fugate & Knicki, 2008; Ng, Eby, Sorensen, & Feldman, 2005; Parker, 1998).

While adaptability itself is an individual difference, there are controversies in the current literature as to whether adaptability is a *compound trait*, "traits [that] are comprised of basic personality traits that do not all covary" (Hough & Schneider, 1996, p. 57), or a metacompetency, a "set of knowledge, skills, and behaviors that allows an individual to respond to a changed situation" (Baard et al., 2014, p. 15). Compound traits are often designed with a criterion in mind; researchers then choose relevant basic traits that are likely to maximize prediction of the criterion. Two examples are the customer service construct and the management potential construct- both have clear outcomes on which they are based. An example of a compound trait in the adaptability realm is Judge and colleagues' "responses to organizational change" (1999, p. 107). In this study, managers' responses to organizational change are said to be predicted by seven basic traits: locus of control, self-efficacy, self-esteem, positive affect, openness to experience, tolerance for ambiguity, and risk aversion (1999). The intent here is that these seven traits should help researchers understand how well managers cope with organizational change, and coping with organizational change as a compound trait can then be used to predict other relevant outcomes like job satisfaction and performance.

An example of adaptability as a metacompetency is seen in Ployhart and Bliese's conceptualization of individual adaptability, predicted and influenced by different knowledge, skills, and abilities like personality, values, and physical ability (2006). The contrast here is that compound traits are composed only of basic traits, while metacompetencies are individual differences that are composed of traits, knowledge, skills, and abilities (Mentkowski, 2000; Rubin et al., 2007). In this study, I view adaptability as a metacompetency, based on previous

work that has supported this idea (Fugate, Kinicki, & Ashforth, 2004; Ployhart & Bliese, 2006; Pulakos et al., 2002; Tucker, Pleban, & Gunther, 2010). Adaptability in this study encompasses both one's willingness and ability to change so it must include personality traits that explain the presence or absence of an approach orientation to change, as well as knowledge, abilities, skills, and other components that allow or inhibit one from exhibiting adaptive performance behaviors, such as integrating information quickly and learning how to use new tools and approaches.

I move forward under the assumption that each person has a relatively stable, innate level of adaptability. It is still useful to briefly discuss what other scholars in the area have speculated influences or composes individual adaptability. There are several traits and processes that commonly emerge when talking about what makes up and predicts adaptability. Emotional stability and openness to experience, two dimensions of the five-factor model, are welldocumented precursors to adaptability (Feist, 1998; Griffin & Hesketh, 2004; Huang et al., 2014; LePine et al., 2000; Pulakos et al., 2002). Additional predictors and components of adaptability include cognitive ability (Burke et al., 2006; LePine et al., 2000; Reder & Schunn, 1999; Ployhart & Bliese, 2006), self-efficacy (Griffin & Hesketh, 2003; Judge, Thoresen, Pucik, & Welbourne, 1999), and locus of control (Crant, 2000; Judge et al., 1999) among others.

By this point it may be evident that individual adaptability has been conceptualized many different ways. Below, I outline some of the major approaches to adaptability and I point out some strengths and weaknesses of each approach. I start with the I-ADAPT, one of the more recent and thorough theories of individual adaptability. I move on to talk about adaptability as applied to creativity and innovation, and then touch upon the work that has been done on proactive personality and career adaptability. Using the discussion of different theories of

individual adaptability, I propose and discuss a spectrum of adaptability that will serve as a conceptual basis for the rest of the study.

*I-ADAPT*. One recent conceptualization of individual adaptability is Ployhart and Bliese' I-ADAPT theory in which individual adaptability is defined as "an individual's ability, skill, disposition, willingness and/or motivation, to change or fit different task, social, and environmental features" (2006, p. 13). This theory seems to be a catch-all; it explains the distal predictors of adaptability, adaptability itself as an individual difference, the mediating processes of the adaptability-performance relationship, and the effect of the environment on adaptability. While it fills a considerable theoretical gap - linking adaptability to its predictors and outcomes, and taking into account situational variables - the relationships among variables are not always mapped out and the model lacks empirical tests. Figure 2 illustrates the I-ADAPT model, reproduced directly from the original publication. A description and discussion of the theory follows.



Figure 2. I-ADAPT theory model, reproduced directly from Ployhart & Bliese (2006).

According to the I-ADAPT theory, individual adaptability contains eight latent dimensions that mirror the eight dimensions in Pulakos and colleagues' adaptive performance construct (2000). There is no specific explanation of why individual adaptability has the same dimensions as adaptive performance, but the authors of the I-ADAPT do say that different KSAOs will predict different facets of adaptability. Allowing adaptability to have eight dimensions is meant to keep the construct flexible and broad but given that there is little empirical support for Pulakos' dimensions, using the dimensions for individual adaptability is hard to support. The next piece of the model asserts that distal KSAOs will predict adaptability. These KSAOs include, but are not limited to, cognitive ability, personality, values, and physical ability. The distal KSAO predictors are meant to be more stable and trait-like, matching the work of other researchers (Mumford et al., 1993; Pulakos et al., 2000). The first problem here is that almost anything can be a distal KSAO; there are no stated boundaries. Secondly, there are no direct relationships drawn between specific KSAOs and dimensions of adaptability. However, because this is one of the only studies that puts forth dimensions of individual adaptability that are *not* basic traits, it is hard to fault the authors for not drawing specific parallels from the distal predictors to the dimensions. There is little to no work done in this area, so these relationships are left unknown for now.

Individual adaptability can either relate directly to task performance, or can be mediated by a number of psychological processes (situation perception and appraisal, strategy selection, self-regulation and coping, and knowledge acquisition). This makes a valuable statement first, because it acknowledges that the environment affects how the situation is being perceived and second, because it explains why some people are better able to adapt than others even when willingness is the same. The mediating processes allow one to recognize cues of change and use decision-making skills to cope with the change. Adaptability here is said to have both an ability and a willingness component.

I-ADAPT makes a number of claims about the adaptability-performance relationship. The first is that performance can come in any form. This is problematic because there is little support for adaptability leading to anything but adaptive or task performance. Keeping the performance domain of the I-ADAPT unrestricted is not necessarily wrong; there simply is not much support for it currently and it feels like the authors are trying to keep their options open.

The next claim is that mostly anything in the model can relate to performance: distal KSAOs, individual adaptability, or individual adaptability through a mediation of psychological processes. Again, these relationships may all be true but they it feels like the authors are reluctant to exclude any option. Why would individual adaptability relate to performance without the influence of mediating processes? Should an employee not have to regulate his or her behavior in order to adapt, no matter what the situation looks like? These and other questions go unanswered, but the possibilities in the model remain.

Lastly is the complicated role the environment plays. Ployhart and Bliese dichotomize environments into stable and dynamic. They then propose that when adaptability is demonstrated in a stable environment, it is automatically proactive. Likewise, when adaptability is shown in a dynamic environment, it is automatically considered reactive. The rationale for this novel idea is that a change in a stable environment must be self-initiated (therefore proactive) whereas changing or dynamic environments *force* change (making action inherently reactive). While reality may not be as black and white as the I-ADAPT suggests, different situations likely do elicit different levels of adaptability. In a dynamic situation where work is constantly changing, there is little opportunity for a proactive person to self-initiate change or notice signs of change before others do; there simply is no time to do so. Likewise in a stable environment there may not be any reason to change so if a person does, it is because he or she independently chooses to do so. The situation does dictates the type of adaptive behavior to some extent.

The I-ADAPT theory is a good start in looking at adaptability from a big picture lens. It incorporates many relevant pieces that other theories neglect, and makes some falsifiable hypotheses about the relationships in the model. It allows for feedback loops, which likely exist given the dynamic nature of many of the relationships outlined in the theory. That being said,

there are also a lot of relationships that seemed to be included as possibilities without strong theoretical or empirical support. This theory is useful in thinking conceptually about individual adaptability, but its limitations make it unsuitable as a primary framework which is likely why it has not been tested empirically.

*Creativity and innovation.* Several researchers have examined the role of adaptability in creativity and innovation (Georgsdottir & Getz, 2004; Meneely & Portillo, 2005; Mumford et al., 1993). One paper talks about types of flexibility similar to the way papers in the adaptability realm talk about proactive and reactive adaptability. Here *adaptive flexibility* refers to the ability to find new solutions when old methods no longer work (Georgsdottir & Getz, 2004). *Spontaneous flexibility* is the ability to generate new solutions without any external pressure to do so. There are established links between flexibility and creative performance with the understanding that people who are less rigid about their knowledge structures are more easily able to make connections within this knowledge (Feist, 1998; Georgsdottir & Getz, 2004; Meneely & Portillo, 2005). While this literature deviates a little from adaptability in the workplace, it provides further support for the benefit of flexible thinking to performance outcomes, and the idea that different types of adaptability exist.

*Proactive personality*. Proactive personality is described as a personal disposition towards proactive behavior, and refers to people who "effect environmental change," "identify opportunities and act on them, show initiative, and persevere until they bring about meaningful change" (Bateman & Crant, 1993, p. 103; Crant & Bateman, 2000, p. 65). Proactive personality differs from individual adaptability in that it is defined by Bateman and Crant as an *instrumental trait*, or a trait that has an impact on the environment. Proactive personality is a trait that reflects

a stable behavioral tendency; individual adaptability is a metacompetency that reflects abilities and competencies in addition to traits.

People who are lower in proactive personality tend to passively adapt to their environment as change comes. The difference in those who are proactive and those who are not again bears resemblance to the continuum of high and low adaptability, and supports the idea that some people are better at identifying cues of change and initiating a search for novel solutions. Several studies have found positive outcomes of proactive personality like job performance (Crant, 1995; Seibert, Crant, & Kraimer, 1999), career satisfaction (Li et al., 2010; Seibert et al., 1999; Seibert, Kraimer, & Crant, 2001), and effective leadership (Bateman & Crant, 1993; Crant & Bateman, 2000). The proactive personality literature provides strong support for the idea of proactive adapters, and also further develops the idea that proactive adapters exhibit behaviors that are beneficial to organizations.

*Career adaptability*. Another measure that taps into an individual's ability to adopt to change at work is the Career Adapt-Abilities Scale (Savickas & Porfeli, 2012). The creators of the CAAS did not focus on defining adaptability directly- they view the change process as an interplay between adaptiveness, adaptability, adapting, and adaptation. These researchers work within career construction theory which says adaptation is only possible if a person is both "willing and able" or possess "adaptivity and adaptability" (Savickas, 2005, p. 663). Willingness or adaptivity refers to one's motivation to do the task. Ability or adaptability means having the resources to do the task. Examples of resources are coping skills, self-regulation strategies, education, and previous adaptability experiences. While the CAAS is complicated and does not neatly incorporate or define the different forms of adapting in a way that is easily understood by the reader, there is an important message here: adaptability is composed of both willingness and

ability. The creators of the CAAS use a clever example is demonstrating this point. When an airline host or hostess asks for passengers to sit in the exit row during a flight, he or she calls for volunteers that are both "willing and able." One may be physically able to help should the plane experience trouble but unwilling to take the responsibility, and one may wish to take on the job but not qualified to complete the job task. Likewise, an employee may want to adapt to his or her surroundings and not have the skills and abilities to do so, or one may possess the competencies to adapt but lack the right frame of mind. Both pieces are essential in identifying truly adaptable employees. The importance of willingness and ability will be highlighted below when I discuss the spectrum of adaptability.

#### Summary: continuum of adaptability

Although individual adaptability has been characterized in different ways in the literature, many conceptualizations include some differentiation between people who initiate change in response to fluctuating environmental pressures, and people who adapt to change only when it is necessary. Ployhart and Bliese's model recognizes that proactivity and reactivity arise in different environments, depending on how demanding and fast-paced the environment is (2006). Griffin and Hesketh address proactive and reactive behaviors, and show support for these two dimensions (2003). Within the innovation and creativity realm is *spontaneous* and *adaptive flexibility*, reiterating the idea that some people can change without external pressure while others have to be prompted to adapt (Georgsdottir & Getz, 2004). Several articles address proactive personality, offering support for a type of person who is unconstrained by situational forces and who affects change as a result of an internal drive (Bateman & Crant, 1993; Crant 2000; Crant & Bateman, 2000; Fuller & Marler, 2009). Huang and colleagues partition adaptive performance into proactive and reactive adaptation, using examples from history to visualize

Forrest Gump's acceptance of change throughout his tumultuous life in comparison to John Kennedy's pursuit of the presidency (2014). These studies and more offer ample support for a continuum of adaptability where quick adapters are self-driven and slower adapters are pushed into change. I make use of this continuum in understanding the differences in adaptability among candidates.

I define someone *high in adaptability* as having both the ability and the approach orientation to identify early signs of change, and the ability to adapt to change before external pressures force adaptation. People high in adaptability often effect change in their environments without external incentives to do so. In an organization this may mean creating a new task force to deal with a problem even if it is not their specific duty to do so. People high in adaptability are willing and able to adopt new approaches, tools, and technologies in the workplace even if the organization does not require it. They adapt to change with an approach orientation and a positive mindset. People high in adaptability are also able to work quickly and efficiently in response to completely unforeseen changes and circumstances.

Someone who is *low in adaptability* is defined as being a passive recipient of change who is not adept at identifying inclement change, and who only alters his or her behavior when it is necessary. Those low in adaptability may exhibit Griffin and Hesketh's tolerant behaviors in that they will maintain their current behaviors despite a changing environment until something or someone forces them to do otherwise (2003). These people are likely less skilled than those high in adaptability when it comes to producing innovative solutions and integrating diverse pieces of information- part of the reason is that they are responding to external pressure instead of necessarily initiating change and progress on their own, so they may have less time and fewer resources to allot to adaptive solutions. They may be less up-to-date about organizational

initiatives and progress, less able to see trends that predict inclement change, and less able to think of solutions when change is needed. People low in adaptability deal with unforeseen change more slowly and with less finesse than those higher in adaptability. Low adapters may also be more hesitant and less positive in their approach to change.

Overall, those high in adaptability tend to take more action, and make decisions more quickly and effectively than those more low in adaptability.

Adaptability in this study is identified as a continuum for a few reasons. The first is the multidimensionality of the adaptability construct. I discussed the importance of willingness and ability in reference to a flight passenger sitting in an exit row. This example applies here in that a candidate can have varying standings on these two pieces. One may be very willing to adapt but lack the awareness to recognize signs of change. Similarly, one may recognize the need to adapt and have the skills to do so, but be devoid of the motivation to change before it is required. A computer programmer who is always willing to be an entrepreneur and try new software will succeed in the technology sector because he or she possesses the needed knowledge to alter his or her behavior and learn new programing languages, operating systems, etc. However, if this same person is confronted with an organizational restructuring where computer programmers are now required to interact with and sell to clients, our programmer may have more trouble recognizing and adapting simply because he or she has more limited experience in sales and building client relationships. It is not that willingness has decreased, it is simply that the foundational knowledge of how to adapt is not there. Overall, people have different motivations and capacities so instead of dichotomizing into high and low adapters, I leave adaptability as a continuum. However, in this study I will be particularly interested in what behaviors people high

on this continuum exhibit in comparison to those who are lower in both ability and desire to change.

During the discussion of adaptive performance and how it has been defined, I said that I would follow previous scholars who looked at both individual adaptability and adaptive performance. For example, Pulakos and colleagues reviewed the literature to create primary dimensions of adaptive performance (2000). They then developed the Job Adaptability Inventory which was designed to measure the adaptive performance dimensions. Lastly, the team developed a predictor measure that covered the eight dimensions (Pulakos et al., 2002). Griffin and Hesketh followed a similar pattern where they identified their construct, used Pulakos' adaptive performance dimensions to form a criterion, and then developed two predictors using the adaptive performance dimensions to utilize in addition to validated personality measures (2003). I follow a similar method: I first define the continuum of high and low adaptability using work that has already been done in the area. I then develop adaptive performance behaviors based on the definitions of high and low adaptability. Table 1 outlines the specific behaviors that are expected for those high and low in adaptability. Lastly, I develop a tool, using the adaptive performance behaviors as a guide, which allows me to test whether situational strength plays a role in expression of individual adaptability.

Behavior	High adaptive performance	Low adaptive performance
Identifying	• Identifying early signs of	• Identifying change only when it
signs of change	<ul> <li>change</li> <li>Integrating information to see change coming</li> <li>Staying abreast of company developments</li> </ul>	is obvious or is pointed out by someone else
Adjusting to	• Being willing to adjust to signs	• Adjusting to change to maintain
signs of change	of change without external pressure	performance on the job or for some other extrinsic motivation (being less willing to adapt to change)
Exhibiting a positive attitude toward change	• Exhibiting a positive attitude towards change	• Exhibiting a hesitant or reluctant attitude towards change
Initiating change	<ul> <li>Initiating change in the environment (without any external pressure)</li> </ul>	• Being a passive observer of the environment
Exploring new approaches, tools, and technologies	• Exploring new approaches, tools, and technologies through own curiosity or initiative	• Retaining current approaches, tools, and technologies until required to change

Table 1. High and low adaptive performance behaviors.

## Adaptability hypotheses

Based on these adaptive performance behaviors, I make specific predictions about those who vary in adaptability. The five behaviors listed in Table 1 are the specific focus of the study because they encompass the main differences in willingness and ability between high and low adapters, and therefore provide a range of behaviors associated with different levels of adaptability. They are also all behaviors that would be exhibited in a workplace. I make the following predictions:

*Hypothesis 1a*: People higher in adaptability will be more likely to identify early signs of change than people lower in adaptability

*Hypothesis 1b:* People higher in adaptability will be more likely to adjust to signs of change without external pressure or motivation than people lower in adaptability.

*Hypothesis 1c:* People higher in adaptability will be more likely to exhibit a positive attitude towards change than people lower in adaptability.

*Hypothesis 1d:* People higher in adaptability will be more likely to initiate change in their environments without external pressure to do so than people lower in adaptability.

*Hypothesis 1e:* People higher in adaptability will be more likely to explore new approaches, tools, and technologies when they become aware of them than people lower in adaptability.
### **OVERVIEW OF SITUATIONAL STRENGTH**

The person-situation debate was resolved through a shared understanding that both pieces were important in predicting behavior but in order to reach this agreement, decades of research about the situation had to be considered and incorporated. As one reviews situation research, it becomes clear that many situation researchers had embraced a form of the person-situation interaction long before the current compromise. This section offers a historical perspective of how situations have been defined and classified, as well as more recent work on how situational characteristics, or *situational strength*, can influence people to behave in predictable ways. Throughout this section, I explain how situations and situational strength will be conceptualized in this study and provide rationales for these conceptualizations using previous research.

## The situation defined

The definition of a "situation" has historically been hard to grasp in psychology (Pervin, 1976; Sherman, Nave, & Funder, 2010; Ten Berge & De Raad, 1999), and after reading a dictionary definition of situation, it is not hard to see why. The dictionary defines a situation as "all of the facts, conditions, and events that affect someone or something at a particular time and in a particular place" (Merriam-Webster's online dictionary, n.d.). This definition underscores the idea that anything and everything can be considered part of the situation, so researchers have included different elements over time depending on how the situation is used in their context.

Sometimes situations are defined by their objective elements; one example of this is Sells' extensive list of situational variables (1963). The variables range from the easily observable, like the weather, to the more discreet, like social status of groups. Everything on the list is adaptable to empirical measurement, but the actor does not influence the situation. Taking

an objective approach allows the inclusion of situational elements that the actor does not realize are influential, but that change behavior nonetheless (Furr & Funder, 2004). This is common in clinical practice. The other advantage is objective situations lend themselves to empirical study. Proponents of an objective approach to situations would agree that while we may not know the nuances of how an actor interprets a situation, we can put participants in situations with the same basic elements and expect some level of consistency. If a participant is placed in a room with a stranger, he or she is much less likely to engage with that stranger than if he or she is placed in a room with a good friend, regardless of individual traits. While this is likely true, an objective approach to situations ignores that humans are constantly interpreting and layering our perspective on our surroundings, and this interpretation explains a lot of *why* we behave as we do.

More frequently, situational definitions take the actor into account and allow the situation to be defined partially through this actor (Krause, 1970; Magnusson, 1971; Moos, 1973). Given that interactionism is widely accepted, it is easy to see why we might think about situations through the lens of the actor; situations shape actors, and actors shape situations to such extent that it is hard to parse the two. Additionally, if the goal is to predict behaviors (which it often is) then one must understand not only the characteristics of the person, but the characteristics of the person in whatever situation he or she is in currently (Monson, Hensley, & Chernick, 1982). If the actor's perspective is not taken into account, it is impossible to tell how he or she is approaching and encoding information in the environment (Mischel, 1977). A stimulus that is exciting to one person may be terrifying to another.

Here, I approach situations with an understanding that they can involve actors, settings, and behaviors, and adopt a person-inclusive view of the situation given that I am interested in the

behavioral effects of a person-situation interaction. I proceed with the assumption that people's personality and motivations color their perception of a situation, and their behavior shapes the situation so that at some point it is difficult to separate what was there before and what is now there as a result of the actor (Bowers, 1973; Pervin, 1978). Next I take a look at some specific situational taxonomies in order to show that many previous researchers have supported an interactionist approach to categorize situations.

## **Categorizing situational characteristics**

Because many people are interested in the impact situational variables can have on thoughts and behaviors, there is a need to systematically categorize situations (Endler, 1993). However, this had been an arduous and elusive process (Frederiksen, 1972; Magnusson, 1971; Sherman et al., 2010). Both empirical and theoretical methods have been used to create taxonomies of situations, some including the person in their structure while others exclude it. A few examples of taxonomies are included below to relay a sense of what has been done, but this list only touches on the numerous taxonomies that have been created.

Krause's taxonomy of situations is unique in that it is theoretically based in ecological psychology whereas many other taxonomies are empirically based (1970). Krause suggests that there are seven classes of social situations in which behavior can be grouped: joint working, trading, fighting, sponsored teaching, serving, self-disclosure, and playing. These situations are not specific environments and can include a host of roles, tasks, and contexts. Krause presented a few generic situations into which many situations could be assimilated, and intended for this structure to be a starting point upon which research could build.

Another example is Van Heck's taxonomy, which took a broad and empirical perspective of situations (1984, 1989). Van Heck went through the dictionary and identified all nouns that could fit the following blanks: "a \_\_\_\_\_\_ situation" or "being confronted with a \_\_\_\_\_\_ situation". There were no words included that referred to inner process, mental states, or motivation. A cluster analysis was used to group all the nouns into ten conceptual dimensions that are very similar to Krause's seven dimensions. The fit of empirical data into an a priori model is impressive, as is the breadth used to create the dimensions (Ten Berge & De Raad, 1999).

Lastly, Pervin's individual taxonomy of daily situations used a much more descriptive and rich method to classify situations (1976). Pervin had four participants identify situations in their lives then list descriptive adjectives and phrases, their behavior, and their feelings in each situation. The data was factor analyzed to link specific feelings and behaviors to specific situations. From these analyses came five distinct dimensions of situations: Home-Family situations, Friends-Peers situations, Relaxation-Recreation-Play situations, Work situations, School situations, and Alone situations. This taxonomy strongly incorporates the individual's feelings and behaviors, and serve as a way to include salient contextual information in the classification of situations.

As can be seen from these examples, situations have been approached in a diversity of ways and there is by no means a single taxonomy used to define characteristics of the situation. Many of the taxonomies do take the human perspective into account when labelling or grouping situations, however, reflecting the idea that the interaction between people and situations is an important one to consider. With this in mind I move to a slightly more concordant area of research: situational strength. The idea here is that there are many characteristics of the situation

but some of them will have more of an influence on behavior than others. In the next section I explore which characteristics have more influence and how researchers have begun to identify these characteristics.

### **Categorizing situational strength**

If classifying situational characteristics were not challenging enough, researchers are also concerned with which specific characteristics influence the type of behavior exhibited in a certain situation. The term situational strength was conceptualized in order to address the "implicit or explicit cues provided by external entities regarding the desirability of potential behaviors" (Meyer et al., 2010, p. 122; Mischel, 1977). The idea is that characteristics of the environment can place pressure on an individual to elicit certain behaviors; different environments "press" people to behave differently and allow for varying ranges of behavior. The value of situational strength is that it can help explain cross-situational variability of noncognitive individual differences (Meyer et al., 2010; Snyder & Ickes, 1985; Weiss & Adler, 1984) such as adaptability. This allows a reframing of the debate about personality in assessment; instead of trying to understand *if* personality is a meaningful predictor of job-relevant outcomes, researchers and practitioners can use situational to understand the *conditions* under which personality will be important (Mischel, 1973).

In order to elaborate on what range of behavior means, it is helpful to look at conceptualizations of strong and weak situations. Strong situations have characteristics that "mute" personality variables and deem few behavioral outcomes to be appropriate; a good example is a funeral, where there are strict scripts of behaviors (Weiss & Adler, 1984). Weak situations, on the other hand, do not provide as much guidance about which behaviors are

appropriate, and people are able to express themselves based on their individual traits. A soccer game allows the exuberant fan and the passive observer to coexist without making either feel out of place.

Price and Bouffard looked at the appropriateness of behavior in different situations in an early effort to examine strong and weak situations (1974). College participants were asked to generate situations and behaviors, and then rate the appropriateness of 225 behavior-situation pairs (i.e. giggle at a funeral). When people judged behaviors to be inappropriate, they also said they would not engage in them. When situations were rated as constraining, people said they were more likely to self-monitor and recognize that others would disapprove of most behaviors within the situation. These findings offered construct validity for behavioral appropriateness and situational constraint, supporting the overall idea of situational strength. Other researchers have posited variations and support for the idea of situational strength (Forehand & von Haller Gilmer, 1964; Milgram, 1965; Mischel, 1973; Schneider & Hough, 1995; Snyder & Ickes, 1985; Weiss & Adler, 1984) though this body of work is smaller than expected given how theoretically sensible the concept is (Cooper & Withey, 2009).

Although there are few taxonomies of characteristics that define the strength of the situation, Meyer and colleagues created one within the organizational literature that binds previous definitions into an applicable framework (Meyer et al., 2010). This facet structure uses clarity, consistency, constraint, and consequence to provide a preliminary structure that draws from the existing construct space. Clarity is "the extent to which cues regarding work-related responsibilities or requirements are available and easy to understand" (p. 125). Consistency describes the extent to which cues about responsibilities and requirements are compatible (i.e. what upper management says is the correct course of behavior matches what organizational

policies say to do). Constraint accounts for how much freedom a person has and to what extent external forces are restricting action. Lastly, consequences addresses the extent to which a person's decisions will affect other people or entities. A person high on empathy may be restrained by consequences in the situation because he or she may not want to hurt others. The creation of this taxonomy was followed by the development and validation of the Situational Strength at Work scale, a measure that assesses the extent to which each facet is present in a participant's job (Meyer et al., 2011). The taxonomy of situational strength is a good step in the right direction in understanding what about a situation makes people feel free or limited to express themselves. However, there is currently limited empirical support for this taxonomy. One recent study used Meyer and colleagues' four dimensions to examine the impact of situational strength on situational judgment tests (Golubovich, 2013). The participants of this study did not perceive differences between weak and strong versions of the assessment, nor was situational strength found to have an effect on the demonstrated levels of personality measured by the SJT. It is clear that more theoretical work needs to be done to ensure that there are indeed four facets and that these are the correct facets, along with more empirical work to support these findings. This study aims to add to the empirical work that utilizes the four facets of situational strength by using the facets to manipulate situational strength in the study materials.

In addition to a facet-structure, the authors meta-analyzed results from previous empirical studies to show support for situational strength as a moderator in the trait-outcome relationship (Meyer, Dalal, & Bonaccio, 2009; Meyer et al., 2010). This supports an idea that will be tested in this study: that situational strength will moderate the individual adaptability-adaptive performance relationship.

There has been additional support for the idea that situational strength can moderate the trait-outcome relationship. The trait as situational sensitivities (TASS) model posits the idea of traits functioning in a "threshold-like" manner (Marshall & Brown, 2006, p. 1100) meaning they are only activated when a person is in a situation that is strong enough to provoke certain behaviors. This model is meant to apply somewhat generally; for most traits, there are cues in the environment that will trigger the trait and cause the person to demonstrate trait behavior. The TASS model was tested on trait aggression specifically. It hypothesizes that in order to understand people at high and low levels of trait aggression (TA) three levels of provocation, or levels of environmental stimuli, are needed. In the first study of this paper, provocation is defined by the type of feedback given to the participant. He or she received positive feedback (weak provocation), feedback that the essay needed work and that not enough time was put in to it (moderate provocation), and that the essay was the worst essay ever written (strong provocation). The hypothesis was that in the weak provocation condition, neither high nor low TA people would react: there are no behavioral scripts, and no aggressive reaction is warranted. Likewise in the strong provocation situation, almost all people will react regardless of their level of TA because they clearly feel threatened. There will be individual differences in behavior because people deal with threats differently, but overall there are stronger norms that instruct participants to behave in a more aggressive way because they have been insulted. Therefore, the moderate provocation condition, where participants are told the essay needs work, can be used to distinguish those high in TA from those low in TA. An aggressive person will selectively attend to cues in a moderate environment that signal confrontation, will put more weight on these cues, and will react in a more aggressive way. Low TA people, on the other hand, need stronger cues than a moderate provocation has to offer in order to exhibit aggressive attitudes or behaviors.

Moderate provocation is the balancing point where people high and low in TA can be distinguished.

While this idea is not novel, previous studies only test threshold at two levels of provocation, missing part of the larger picture (Beaty, Cleveland, & Murphy, 2001; Meyer et al., 2011; Monson et al., 1982). All three levels are needed to understand the difference between those in high or low standing on the trait. Although TASS is criticized for lack of theory and shaky operationalization of the different levels of provocation (Schmitt, et al., 2008), it is empirically supported and offers a compelling model of the person-situation interaction. However, there is room for improvement in incorporating situation-trait relevance. Situation-trait relevance is rooted in the principle of trait activation (Tett & Guterman, 2000). Trait activation means that there are trait-relevant situational cues present which contribute to the exhibition of trait behavior. For example, aggression is more likely to be exhibited in situations where there are aggressive cues, such as physical fighting or weapons, rather than one in which there are anxiety-provoking cues like funeral homes or hospital beds.

Trait activation is different from situational strength; the difference has been described as "quality vs. quantity" (Tett & Guterman, 2000). Trait activation refers to the *type* of information in the situation, whereas situational strength is an indicator of how *compelled* one feels to follow the situation's press instead of one's own natural inclinations. There two concepts interact to make trait activation possible. In order for trait-relevant cues to have an impact, the actor must be in a weak- to moderate-strength situation. If he or she is in a strong situation, the trait-relevant situational cues will be not differentiate- everyone will be reacting similarly to the cues because the situation exerts too much pressure to do much else. Continuing on with the example of

aggression, I use war as a situation that encases many trait-relevant cues, but is simultaneously too strong of a situation for even the non-aggressive not to respond to.

Table 2 shows six situations sorted by situational strength and trait-activation. This table is designed to provide a clearer picture of the types of situations this study will use in the experimental manipulation. Weak situations are those in which there are few scripts for behavior, and many different responses would be considered acceptable. Moderate strength scenarios are those in which there is some structure to the behavior, but still relative freedom of expression. Strong situations are those in which there is a well-defined and transmitted understanding of the behaviors that should be elicited. Trait-relevant situations include cues that are relevant to the trait being measured, in this case aggression. In the trait column, the scenarios have some kind of stimuli that signal violence or danger. The non-trait situations do not include threatening objects, and therefore do not signal aggression to the individual as strongly. The highlighted column includes the types of situations that I look at in this study- all scenarios will include cues that signal the need for adaptability, but will be manipulated so that the appropriate script of behavior is more or less strong.

	Trait-relevant situational cues	No trait-relevant situational cues
No provocation	In a rifle store	In a child's bedroom
Moderate	In a batting cage	In a laundromat
Strong	In an instructional self-defense class	In a yoga class

Table 2. Scenarios by situational strength and trait activation for aggression.

The hypotheses of this study are based on an application of the TASS model and the recommendation that three levels of strength or provocation are needed to differentiate between

those who are high and low on a trait, as well as the idea that situation-trait relevance contributes to expression of that trait. Because many work environments are fast-paced and most preemployment assessments need to be completed in a short amount of time, organizations are interested in the *type* of adaptive behaviors demonstrated instead of the *quantity*. Therefore an effective adaptability selection tool will be one that 1) presents trait-relevant situation cues and 2) provides situations with moderate provocation. In order to support these ideas, this study will examine how varying provocation in trait-relevant situations leads to different behaviors on the part of those high and low in adaptability.

# Situational strength hypotheses

I hypothesize that in both weak and strong situations, the course of action will be obvious and there will be few differences in adaptive performance by high and low adapters. In weak situations where there are no clear guidelines for which behaviors should be exhibited and very little information available, most people, regardless of adaptability level, will likely hesitate to act until they have more information. There are not enough cues or hints for even a high adapter to take action.

*Hypothesis 2a*: In weak situations, both those high and low in adaptability will exhibit less adaptive behaviors that they will in moderate or strong situations.

Similarly in strong situations it will be evident to all, regardless of adaptability level, which behaviors individuals should exhibit. A strong situation may be one in which an immediate change is required without warning. In these situations employees will have little choice but to react to their circumstances. This same inflexibility is shown in the I-ADAPT theory when the authors speculate that dynamic environments inherently provoke reactive

behaviors. When the environment is changing quickly, employees cannot exhibit individual differences because they are pushed into a preordained course of action.

*Hypothesis 2b*: In strong situations, both those high and low in adaptability will exhibit more adaptive behaviors than they will in weak or moderate situations.

It is important to note that in this study, a strong situation is also one in which adaptability is activated, meaning there are signs in the environment that prompt adaptability. A strong situation where adaptability is *not* trait-activated would not necessarily elicit more adaptive behaviors. In these cases it would be faulty to assume that just because a situation is strong that more adaptive behaviors are expected. However, all of the scenarios in this study will be ones in which adaptability is needed, therefore adaptive behaviors are expected from both high and low adapters.

Lastly, I hypothesize that in moderate strength situations high adapters will recognize subtle signs of change before low adapters, and will have both the willingness and ability to change upon recognition of these signs. Situations that are moderate in strength provide the tipping point where those high in adaptability can show their adaptability by adjusting even if change is not yet required. High adapters may see problems and initiate a solution even though the problem does not yet warrant an intervention. While this innovation and problem-solving can also happen in a weak situation, it may be more likely to occur in a moderate situation because the employee has enough information to know there is a problem, and sufficient guidance to provide a solution that may hold long-term. In a moderate strength situation where a new tool or approach is introduced but its use is not required, someone higher in adaptability will be more likely to become acquainted with the tool and even incorporate it into everyday life. Therefore, I

speculate that moderate strength situations will allow sufficient indicators for a high adapter to take action but not so many indicators that a low adapter feels the need to change his or her behavior.

*Hypothesis 2c*: Situational strength will moderate the relationship between individual adaptability and adaptive performance in that those who are higher in adaptability will exhibit more adaptive behaviors in moderate strength situations than those who are lower in adaptability.

I do not expect the "exhibiting a positive attitude" behaviors to be affected by situational strength. I believe that those high in adaptability will generally exhibit a more positive attitude toward change, regardless of the situational characteristics. The reason is that people high in adaptability approach change with a more positive mindset so any type of change, small or large, will be seen as good. There does not need to be a tipping point where those high in adaptability feel like they can now display a positive attitude toward change; this tipping point is more important in exhibiting the other four types of adaptive behaviors. Figure 3 shows the expected effect of situational strength on the other four adaptive performance behaviors for high and low adapters.



*Figure 3*. Hypothesized effect of situational strength on level of adaptive performance for high and low adapters.



Figure 4. Proposed model.

### **METHOD**

## Sample

For this study, 215 undergraduates from Michigan State University's participant pool were used. Fifty-one of the participants were male (23.7%) and 163 of them were female (75.8%) with one person not reporting gender. There were 162 White (75.3%), 30 Asian (14.0%), 9 African-American or Black (4.2%), and 3 Middle Eastern (1.4%) participants. There were 10 participants who identified as other (4.7%) and 1 unreported (0.5%). The mean age was 19.4 years with a standard deviation of 1.7 years.

# **Research design**

This study used a between-subjects experimental design with one manipulation that had three levels: weak, moderate and high situational strength. Laboratory experiments have been shown to have high internal and external validity, especially within industrial-organizational psychology (Highhouse, 2009).

While there were three in-basket scenarios used during the study, scenario was not intended to serve as another independent variable. Multiple scenarios were merely the best way to manipulate situational strength so that I had enough variability in trait adaptability in each of my three levels to test for significant effects.

There were five dimensions of adaptive performance utilized in this study. Each dimension was assessed through the use of three items (one in each of the three scenarios). These

three items were then averaged to create a composite for each of the five performance dimensions.

The table below illustrates what one participant in the study would experience. She would see all three scenarios, but be randomly assigned to one level of manipulation for each scenario. The X indicates that she would answer one item in each scenario related to each of the five dimensions of adaptive performance. At the end of the study, she would have answered three items related to each dimension. This was not a fully-crossed design, so participants were randomly assigned to one level of the manipulation per scenario. This means that participants could have seen the same level of the manipulation for two scenarios.

Table 3. Items answered by	y a	participant	completing	the study.
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Adaptive performance dimensions	Scenario 1: Acquisition			Scen	ario 2: New	CEO	Scenario 3: Tech platform		
	Weak	Moderate	Strong	Weak	Moderate	Strong	Weak	Moderate	Strong
Identifying signs of change		Х		X					Х
Adjusting to signs of change		Х		X					Х
Exhibiting attitude toward change		Х		X					Х
Initiating change		Х		X					Х
Exploring new approaches, tools, and technologies		Х		X					Х

## **In-basket development**

*Description.* In-basket exercises comprised of three scenarios were used to assess participants' adaptive performance. Each scenario included instructions to the participants about what role they are playing (i.e. consultant, sales representative, etc.), what company they were a member of, and what their job responsibilities included. Each scenario had correspondences, letters, memoranda, or other documentation to relay the information that was used in answering the situational judgment items. Participants were asked to answer multiple-choice situational judgment items about their intended action. The multiple-choice questions were scored based on the high and low adaptive performance behaviors. Participants were also asked to answer several attention and manipulation checks throughout the study.

*Development of in-basket scenarios*. These steps were followed to create the three scenarios and items used during the in-basket (see Appendix A for complete survey).

1. I identified trait-relevant work scenarios in which high and low adaptability can be demonstrated, and in which the idea of change was evident. These scenarios provided the opportunity to demonstrate the adaptive performance behaviors outlined in Table 1, and were designed to be trait-relevant situations (Tett & Guterman, 2000). The scenarios were also designed to be understandable by a student population (meaning they were general enough that someone who has not done the job or any form of a work samples test was able to complete it). These scenarios were all chosen to be at the organizational level so as to be consistent from a levels perspective. The changes described in the scenarios (company acquisition, new CEO, and new technology platform) all occurred at the

highest level of the organization and had implications for employees across the organization.

- 2. There was one manipulation with three levels in the in-basket exercise: weak, moderate, and strong situational strength. The levels of manipulation were created around Mischel's definition of a strong situation, or situations that "lead everyone to construe the particular events the same way, induce uniform expectancies regarding the most appropriate response pattern, provide adequate incentives for the performance of that response pattern and require skills that everyone has to the same extent" (Mischel, 1977, p. 347). Weak situations are those that allow flexibility in interpretation of events, initiate different response patterns, do not provide specific incentives for any course of behavior, and allow individuals to exhibit skills that they may have but others may not have. Moderate situations outline some script for behavior, meaning there is some restriction to behavioral expression, but these scripts are not as powerful (they do not force the person in the situation to conform as much) as they are in a strong situation. Because Mischel's definitions do not provide much specific guidance on how to manipulate environments for situational strength, I also used Meyer et al.'s four facets of situational strengthclarity, consistency, constraint, and consequence (2010). For example if one document had aspects of clarity and consequence, I changed the wording to denote low clarity and consequence for the weak level of manipulation, and strong clarity and consequence for the high level of manipulation. The format and overall length for each of the documents was consistent.
- 3. I developed three sets of correspondences, letters, memoranda, and other documentation that provided the relevant information for each scenario (see Appendix A). Level of

manipulation (weak, moderate, or strong) was built into the documents. Each scenario had a set of documents that served as one of the three levels of the manipulation, totaling three sets of documents for each scenario. For example, for the company acquisition scenario, there was one set of documents that comprised the weak situational strength level, one set of documents for the moderate strength level, and one set of documents for the strong strength level. A participant would only see one of these sets of documents for this scenario depending on which level he or she was randomly placed in. Figure 5 aims to further clarify this point using the company acquisition scenario as an example.



Figure 5. Levels of situational strength for each scenario.

4. For each scenario there was an introductory paragraph that asked the participant to imagine he or she was an employee at a certain company. The participant was told his or her job responsibilities, and given a brief description of the company. Androgynous names were used so they could apply equally well for male or female participants, and culturally-diverse names were chosen for each scenario. A total of four attention checks and one manipulation check was created for each scenario. The four attention checks asked for participants to recognize information they had just read about their names, positions, and companies. The manipulation check asked to what extent the documents helped the participant answer the SJIs in order to provide a rough approximation of whether the manipulations were noticeable.

*Development of adaptive performance behaviors*. The adaptive performance behaviors used were the ones described earlier in the paper, developed from the definitions of high and low adaptability.

Development of situational judgment items reflecting adaptive performance dimensions. I developed fifteen situational judgment items that assessed adaptive performance. There was one item for each adaptive performance dimension (5 items total) for each of the three scenarios. These items were developed by choosing situations that were both related to the exercise scenario and where it would be possible for a participant to demonstrate adaptive performance. The situations used in the SJIs came from personal knowledge, and an understanding of the types of situations an employee could encounter in a workplace. I created the items stems so that they related to the scenario documents, and provided an opportunity to display adaptive performance. I then created the item responses so that they ranged from less adaptive behavior to highly adaptive behavior, as outlined in Table 1. The item responses, as seen in Appendix A, are ordered from least adaptive (a) to most adaptive (e).

#### **Pilot-testing**

*Pilot testing of adaptive performance behaviors*. Subject matter experts (three organizational psychology graduate students) were given the definitions of high and low adaptability. They then received several cards that each had one performance behavior from Table 1 on them. The SMEs were asked to sort the behaviors as showing high adaptability, low adaptability, or other if the card does not seem to fit in either group (see Appendix B for instructions). Their sorting were compared to my original conceptualization.

All three of the SMEs sorted the cards according to my original conceptualization. When asked if they were unclear or unsure about the cards, two SMEs expressed uncertainty about the facet of low adaptability that reads "approaching change with some hesitation or annoyance". One SME was unsure about whether this meant the person did not change, or if he or she just had a negative attitude toward change. The other SME felt that a facet that said "approach" should only be used for those high in adaptability because it connoted an approach orientation. Because the cards were sorted correctly and there was not a consistent response to what was uncertain about the facet, the wording was left as it was originally.

*Pilot testing of scenarios, items, and instructions.* The instructions, scenarios, and items were given to two SMEs (professors in organizational psychology) for reviews and revisions. Wording in the scenarios was changed to make the manipulations stronger, such as removing content that was standardized across the situations to reduce cognitive load so that the differences among manipulations were more apparent. Other changes were made to make the consequences of

certain organization-level policies more apparent, so that a non-working sample would understand how big the consequences of certain actions were. For example, instead of indicating that there would be policy changes that may result in staff reductions, the wording was changed to say that employees would be fired because the company could not afford to retain a workforce of its current size.

*Pilot testing of situational strength.* The levels of manipulation were then given to subject matter experts (organizational psychology graduate students) for clarity reviews and edits. SMEs were provided a brief explanation of situational strength. Then for each document of the scenario, the three levels were presented in random order. SMEs were asked to order the situations from strongest to weakest. SMEs were then asked to provide a brief justification for why they ordered the situations as they did. Lastly, they were asked for recommendations of changes if they had any to suggest. See Appendix C for the situational strength pilot test script.

The pilot test revealed that there was moderate disagreement on the interpretation of the strength of scenarios. SMEs ordered the scenarios multiple ways, often having opposite responses. The inter-rater reliability ranged from .30 to 1.00 with the mean around .71. As a result the scenarios were heavily edited to remove standardized content, move content from the weak manipulation to the strong manipulation in cases where most raters coded strength opposite to what I intended, and alter the tone of correspondence in the strong manipulation to make the requests sound less optional.

*Pilot test of all materials with targeted participant population.* The full study was then pilot-tested with a group of undergraduates. The undergraduates took the study as normal participants, and were asked to pay special attention to wording or concepts that were unclear or

unfamiliar. The pilot-testers were provided with a hard-copy of the materials to write notes as they went through the study. After the six participants completed the study, a brief focus group was held where I asked if wording was clear, concepts were familiar, the instructions made sense, and the amount of reading material was appropriate. As a result of comments from this pilot-test a few spelling errors were corrected and the format of the email documents was changed to increase legibility.

## Measures

*Proactive personality*. Bateman and Crant's (1993) Proactive Personality Scale was used to assess trait adaptability. Proactive personality is defined as a personal disposition towards proactive behavior, and refers to people who "effect environmental change," "identify opportunities and act on them, show initiative, and persevere until they bring about meaningful change" (Bateman & Crant, 1993, p. 103; Crant & Bateman, 2000, p. 65). The scale contains 17 items and participants responded on a scale or 1 (strong disagree) to 5 (strongly agree).

This measure has been found to be significantly related to conscientiousness and extraversion, but not to openness, agreeableness, or neuroticism (Bateman & Crant, 1993). It is also unrelated to cognitive ability as measured by the Wonderlic. This measure has been used in previous studies with acceptable reliability and validity (Crant, 1995; Crant, 1996; Eby, Butts, & Lockwood, 2003; Kammeyer-Mueller & Wanberg, 2003; Seibert et al., 2001). The Cronbach's alpha for the Proactive Personality Scale in this study was  $\alpha = .87$ . Please see Appendix D for measure.

*I-ADAPT-M*. The I-ADAPT-M (measure) is a 55-item self-report measure that was created by Ployhart and Bliese (2006) that assesses the Pulakos et al.'s (2000) eight dimensions

of adaptability on a scale of 1 (strongly disagree) to 5 (strongly agree). A confirmatory factor analysis done early in the measure's development found support for the eight latent factors and a second-order factor of adaptability. The scale has not been used much in organizational literature since its creation. For this study, the overall Cronbach's alphas was  $\alpha = .92$ .

I first looked at the reliabilities of each of eight dimensions. These item loadings for each of the eight dimensions can be found with the measure in Appendix E. The reliabilities were: creativity ( $\alpha = .72$ ), crisis ( $\alpha = .81$ ), cultural ( $\alpha = .79$ ), interpersonal ( $\alpha = .72$ ), learning ( $\alpha = .85$ ), physical ( $\alpha = .69$ ), uncertainty ( $\alpha = .69$ ), and work stress ( $\alpha = .82$ ). I then conducted a confirmatory factor analysis to see whether the eight dimensions held for my dataset or if a one factor solution offered better support. The eight factor solution had slighter better fit ( $\chi^2$ = 3068.27, *p* < .01; CFI = .58, NFI = .44, RMSEA = .07) than the one factor solution ( $\chi^2$ = 3321.28, *p* < .01; CFI = .52, NFI = .39, RMSEA = .08) although neither solution had values within accepted fit indices.

*Trait adaptability composite.* A composite of the two trait adaptability measures, the Proactive Personality Scale and the I-ADAPT-M, was computed by first converting the composites of the two scales to z-scores, and then adding the z-scores to create one composite of both scales.

*Adaptive performance*. The five dimensions of adaptive performance that were created for this study were assessed through situational judgment items. There were three items that assessed each of the five dimension, and the SJIs had five response options that contained a range of low to high adaptive behavior.

In order to increase reliability, the three items that related to each of the five dimensions were averaged to create a composite (from now on called *dimension composites*). The reason for this was to have a variable that more reliably assessed a participant's level of adaptive performance across the different scenarios. This resulted in composites for the variables identify early signs of change ( $\alpha = .42$ ), adjust to signs of change ( $\alpha = .02$ ), positive attitude ( $\alpha = .21$ ), initiate change ( $\alpha = .26$ ), and explore new tools and approaches ( $\alpha = .18$ ). These scale reliabilities were very low, but research has shown that situational judgment tests are often multidimensional, so internal consistency reliability is not the best way to measure reliability with these item types (McDaniels, Hartman, Whetzel, & Grubb, 2007; Motowidlo, Dunnette, & Carter, 1990; Ployhart & Ehrhart, 2003).

In the assessment center literature, there is has been some debate about whether dimensions or exercises are a more meaningful way to look at performance (Bowler & Woehr, 2009; Hoffman, Melchers, Blair, Kleinmann, & Ladd, 2011; Lievens & Conway, 2001). Dimensions were found to demonstrate performance that was consistent across situations, and exercises were found to reflect more of a measurement factor. In order to see whether the items in this study were better explained by dimension factors or exercise (scenario) factors, two confirmatory factor analyses were conducted in LISREL. The five-factor model that grouped items by dimension had better fit ( $\chi^2$ = 85.15, *ns*; CFI = .91, NFI = .48, RMSEA = .02) than the three-factor model that grouped items by scenario (( $\chi^2$ = 125.32, *p* < .01; CFI = .36, NFI = .24, RMSEA = .05). The CFAs offer some support for the idea that the dimension composites are a more meaningful way to look at the results. Because dimension composites were the intended unit of analysis both conceptually and in the hypotheses, future analyses use the dimension composites but also look at *scenario composites* in a more exploratory fashion. The three scenario composites were an average of the five SJIs assessed in each scenario. The three composites are the acquisition composite ( $\alpha = .02$ ), the CEO composite ( $\alpha = .08$ ), and the technology composite ( $\alpha = .13$ ).

*Cognitive ability*. Cognitive ability was included to see if it should be used as a control for performance on the assessment center exercise. Previous studies have found a relationship between cognitive ability and assessment center performance (Jansen, Melchers, Lievens, Kleinmann, Brandli, Fraefel, & Konig, 2013; Spector, Schneider, Vance, & Hezlett, 2000). Participants' SAT and ACT scores were collected as a proxy for cognitive ability. Previous studies have found high correlations between scholastic assessments and general intelligence, r=.30 - .83, .86, and .77 respectively (Coyle, 2006; Frey & Detterman, 2004; Koenig, Frey, & Detterman, 2007). Participants' GPA was also be collected as a secondary proxy for cognitive ability. Several studies have demonstrated positive relationships between GPA and g, r = .50, .30, and .41 respectively (Pesta & Poznanski, 2008; Song et al., 2010). Both test scores and GPA will be self-reported; previous studies have found high correlations between self-report and registrar records (Cassady, 2001; Fisher, 1997). See Appendix G for specific items.

*Demographics*. Participants were asked about their year in school, age, gender, and ethnicity. See Appendix G for specific items.

# Procedure

Participants were recruited through the MSU participant pool. Participants were told the session would be half an hour long and they would receive one credit for participating. Participants signed up through the HPR online system and were told which computer lab to come to at what time. Anywhere from eight to twenty spots were open per session. The study materials

were transferred to a Qualtrics platform by the researcher, and preloaded on the computers before the participants entered the lab. The order of the scenarios, level of manipulation for each scenario, response options for the SJIs, and Proactive Personality Scale/I-ADAPT measures were all randomized.

Once participants were seated, they were read a standardized script by the researcher (see Appendix F for script). They were then told they could start the study. Each participant was provided with a pad of paper and a pencil to take notes on the documents in the study if they wished. Participants were asked for their HPR or MSU IDs during the study so that credit could be assigned. Once participants had finished the online portion of the study, they were shown a screen that asked them to wait until a debriefing form was given to them before they left. Five minutes before the end of the session, the researcher passed out a paper copy of the debriefing form and informed the participants they could leave once they had completed the study and read the form. The researcher downloaded the data at the end of each day of data collection and assigned credit to participants on the HPR system.

### RESULTS

## **Data cleaning**

First, I examined the data to see which participants should be excluded due to failed attention checks. There were twelve attention checks in the exercise, and five more in the adaptability measures for a total of 17. All failed attention checks were identified in the data. A decision rule, which said that 90% of the attention checks had to be answered correctly in order for a participant's data to be used, was implemented. This resulted in 27 participants being excluded from all future analyses.

There were also three manipulation checks in the study, one for each scenario. This manipulation check asked participants to what extent they used information in the documents when answering the situational judgment items on a scale of 1 (to a great extent) to 4 (not at all). When tested using an analysis of variance (ANOVA), there were no significant differences. However the mean values showed that for two scenarios (acquisition and technology), participants indicated they used the documents the most in the weak level and the least in the strong level. For the CEO scenario, the documents were used the most in the weak level and the least in the moderate level, though the differences were very small between mean use for moderate and strong levels.

## **Initial analyses**

Next, descriptive statistics were examined for the items and measures to ensure all values were within range. I searched for missing data and outliers, neither of which were found. Normality, skewness, and kurtosis were also examined. The Shapiro-Wilk test showed that none of the items for the three scenarios were normally distributed but both of the adaptability

measures were. The lack of normal distribution was not expected to affect the results of ANOVAs and regressions because both are quite robust to violations of normality, so the data were used going forward (O'Brien & Kaiser, 1985). Skewness and kurtosis were not outside of the +/- 2 range for skewness or +/- 7 range for kurtosis recommended by Curran et al. (1996).

I then looked to see whether year in school, age, or cognitive ability were significantly related to the criterion- the SJIs used to assess adaptive performance. Researchers have recommended providing a theoretical reason for why certain demographic or individual differences variables should be included as controls (Carlson & Wu, 2011; Spector & Brannick, 2011). Both school and age were used as proxies for experience and tenure because tenure has been found to moderate the relationship of other variables and performance (Wright & Bonett, 2002). Cognitive ability, as stated previously, is strongly related to assessment center performance so it was also examined to see if it should be controlled for using GPA as a proxy. These were both tested through correlations.

None of the three variables were significantly related to the dimension composites. As an additional check, the three potential controls were correlated with the individual adaptive performance items but none of these relationships were significant either. Therefore control variables were not included in future analyses.

Descriptive statistics and correlations for the adaptability measures, dimension composites, and scenario composites can be found in Table 4.

		М	SD	1	2	3	4	5	6	7	8	9	10	11
1	Proactive Personality Scale	3.73	.46	-										
2	IADAPT Measure	3.65	.37	.59**	-									
3	Trait adaptability			.89**	.89**	-								
4	Identify early signs of change	3.46	.83	.00	05	03	-							
5	Adjust to signs of change	3.02	.79	.00	.00	.00	.03	-						
6	Positive attitude	3.60	.77	.10	.20**	.17*	04	.04	-					
7	Initiate change	3.27	.92	04	01	03	06	.03	02	-				
8	Explore new tools and approaches	3.71	.79	.04	.11	.09	.02	06	.21**	.07	-			
9	Acquisition	3.25	.62	.09	.11	.11	.19**	.31**	.24**	.36**	.31**	-		
10	CEO	3.46	.59	05	06	06	.36**	.21**	.35**	.38**	.25**	.13	-	
11	Technology	3.53	.59	.03	.14*	.10	.23**	.30**	.32**	.18**	.41**	.00	.16*	-
12	Cognitive ability	6.30	1.78	07	14*	12	.03	.07	.00	08	01	03	.00	.02

Table 4. Means, standard deviations, and correlations for scenario, dimension, and trait adaptability composites.

*Note*: All variables are composites. Trait adaptability M and SD not included because z-score. Cognitive ability collected on a 1-9 scale. \* < .05, \*\* < .01

#### Individual adaptability and in-basket items

The first set of hypotheses aimed to see if people with differing levels of adaptability exhibited different levels of adaptive performance. This was examined by correlating participant's trait level of adaptability (a sum of the z-scores of the two adaptability measures) with their responses to the situational judgment items. There were five hypotheses for the five dimensions of adaptive performance posited in this study, and all correlations were expected to be positive. Only Hypothesis 1C was supported as the results showed a positive relationship between trait adaptability and approaching change with a positive attitude, ( $r = .17, p \le .05$ ).

None of the following were supported: Hypothesis 1A about identifying early signs of change (r = -.03, ns), Hypothesis 1B about adjusting to signs of change in the environment (r = .00, ns), Hypothesis 1D about initiating change in the environment (r = -.03, ns), or Hypothesis 1E about exploring new tools, approaches, and technologies (r = .08, ns).

An exploratory analysis looked at whether any of the dimension composites were correlated with the trait adaptability measures separately. The only significant relationship was between approaching change with a positive attitude and the I-ADAPT-M (r = .20, p < .01). Another exploratory analysis was conducted to see whether any of the eight hypothesized dimensions in the I-ADAPT correlated with the dimensions composites. The crisis sub dimension of the I-ADAPT, relating to reacting quickly and appropriately to emergencies, was significantly correlated with the approaching change with a positive attitude dimension composite (r = .14, p < .05). The learning sub dimension; which has to do with learning new work tasks, technologies, and procedures; was significantly correlated with both approaching change with a positive attitude (r = .17, p < .01) and exploring new tools, approaches, and technologies (r = .16, p < .05). The physical sub dimension, related to adjusting to challenging environmental states and pushing oneself to perform physically-strenuous tasks, was also related to approaching change with a positive attitude (r = .17, p < .01). Lastly the work stress sub dimension; relating to managing frustration, staying calm in the face of stress, and demonstrating resilience; was negatively correlated with identifying early signs of change (r = ..14, p < .05) but positively related to approaching change with a positive attitude (r = .16, p < .05).

*Table 5*. Means, SDs, and correlations between I-ADAPT dimensions and dimension composites.

	М	SD	Identify early signs of change	Adjust to signs of change	Positive attitude	Initiate change	Explore new tools and approaches
Creativity	3.51	.56	.10	02	.12	.02	.12
Crisis	3.78	.55	08	.01	$.14^{*}$	03	.06
Cultural	4.12	.55	02	05	.11	.00	.05
Interpersonal	4.09	.42	.02	02	.09	02	.09
Learning	3.85	.49	.01	.02	$.17^{*}$	01	$.16^{*}$
Physical	3.42	.52	03	.06	$.17^{*}$	06	.01
Uncertainty	3.39	.43	09	07	.12	.09	.13
Work stress	3.01	.82	14*	.03	.16*	03	.04

\*\*  $p \le .01, * p \le .05$ 

Another exploratory analysis looked at whether the trait adaptability composite was correlated with the scenario composites. None of the correlations were significant. The correlation matrix can be found in Table 4.

#### Individual adaptability and situational strength

*Statistical technique.* In order to analyze the data, a linear mixed-effects models (MIXED) procedure was used in SPSS (Statistical Package for the Social Sciences, 2005). MIXED can be used to analyze ANOVA models that include both between and within subject variables. In this study, scenario was a within-subjects factor but situational strength of the manipulation was between-subjects. The complication was that although each subject participated in all three scenarios, for each scenario the level of the manipulation was randomly assigned.

For example, one subject might have seen the acquisition scenario at weak strength, the CEO scenario at moderate strength, and the technology scenario at strong strength. Another might have seen both the acquisition AND technology scenarios at moderate strength, and the CEO scenario at strong strength. To analyze these data, I needed a technique that controlled for the fact that I had a repeated subjects design and a randomized variable.

Before analysis, the data were restructured so that each participant had three data records: one for each scenario (see SPSS, 2005 page 3 for an example of how the restructured data looked). Then a restricted maximum likelihood method was used in MIXED with condition, scenario, and their interaction as fixed effects. The repeated measures component of the model was specified by including a random intercept for participants, and MIXED accounted for the randomized variable. By doing this, I did not violate the assumption of independence in the data. The analysis used in this study was essentially the same as a regular ANOVA, but used MIXED's flexibility to account for the randomization of the scenario variable.

*Weak situations elicit less adaptive behaviors*. For this set of hypotheses I looked at whether situational strength of the scenario (manipulated through the documents read by participants) affected how participants responded to the in-basket items. Hypothesis 2A stated that in weak situations, participants should exhibit less adaptive behaviors than in moderate or high strength situations. It is important to note that I did not hypothesize that the *positive attitude* dimensions scenario would vary based on situational strength. The reason for this is people high in adaptability should approach change with a more positive mindset regardless of what is happening in the environment. Indeed, this ideas was tested and supported by the positive correlation between trait adaptability and positive attitude found in Hypothesis 1C. Therefore, the following analyses for Hypothesis 2 do not include the positive attitude items.

Hypothesis 2A was first tested by a multiple analysis of variance (MANOVA) which showed that strength did have a significant effect on the identify early signs of change and adjust to signs of change dimension composites (Pillai's Trace = .07, F(10,1264) = 4.23, p < .01). Follow-up ANOVAs for the identify early signs of change composite, F(2,591.67) = 15.19, p <.01, showed that the weak level (M = 3.14, SE = .08) was significantly different from both the moderate (M = 3.53, SE = .08) and strong (M = 3.74, SE = .09) levels. For the adjust to signs of change composite the ANOVA, F(2, 629.94) = 10.45, p < .01, showed that the weak level (M =2.69, SE = .09) was again significantly different than both the moderate (M = 3.10, SE = .09) and strong (M = 3.27, SE = .10) levels. Therefore Hypothesis 2A was partially supported because the weak level of the manipulation showed the least adaptive performance.

An exploratory MANOVA was conducted to see if the scenario composites differed based on strength. The MANOVA was significant for the CEO composite (Pillai's Trace = .03, F(6,1276) = 2.68, p < .05. A follow-up ANOVA, F(2,633) = 4.94, p < .01, showed that the weak level (M = 3.37, SE = .04) was yet again significantly different than the moderate (M = 3.49, SE = .04) and strong (M = 3.53, SE = .04) levels. The means for adaptive performance at all three levels of strength can be found in Table 6.

*Table 6*. Means of adaptive performance by situational strength for dimension and scenario composites.

	Weak		Moder	ate	Stron	g
	М	SE	М	SE	М	SE
Identify early signs of change	3.14 <sup>a</sup>	.08	3.53 <sup>b</sup>	.08	3.74 <sup>b</sup>	.09
Adjust to signs of change	2.69 <sup>a</sup>	.09	3.10 <sup>b</sup>	.09	3.27 <sup>b</sup>	.10
Positive attitude	3.62	.09	3.64	.08	3.55	.09
Initiate change	3.24	.10	3.26	.10	3.30	.11
Explore new tools and approaches	3.70	.09	3.75	.09	3.70	.09
Acquisition	3.21	.04	3.22	.04	3.31	.04
CEO	3.46 <sup>a</sup>	.04	3.47 <sup>b</sup>	.04	3.46 <sup>b</sup>	.04
Technology	3.46 <sup>a</sup>	.04	3.59 <sup>b</sup>	.04	3.54 <sup>ab</sup>	.04

*Note:* Same letter in superscript indicates means are not significantly different from one another. No superscript indicates no significant differences among level of strength.

*Strong situations elicit more adaptive behaviors*. The same set of ANOVAs was used to see whether strong situations elicited more adaptive behaviors than low or moderate strength situations. The ANOVA for identify early signs of change and adjust to signs of change were examined again because they were significant, but the strong level was not significantly different than both the weak and moderate levels. Therefore Hypothesis 2B was not supported.

The ANOVA for the CEO composite was also looked at again; the strong level was not significantly different than both the weak and moderate levels here either.

*Moderation by high and low levels of adaptability.* For the last hypothesis in this set (Hypothesis 2C), I was interested in whether high and low adapters behaved differently in the moderate strength level for four out of the five adaptive performance dimensions. The rationale was that moderate situational strength provide enough cues to prompt high adapters to behave adaptively, but not so many that low adapters exhibited adaptive performance. This hypothesis was tested using several moderated regressions. The variables for strength were dummy coded using the strong level as the referent, and centered prior to the analysis. Four hierarchical regressions were conducted, one for each of the relevant dimension composites. There was only one dimension composite for which adding the interaction terms led to a significant change in R<sup>2</sup> and this was for the initiate change composite. This indicated that the effect of trait adaptability on adaptive performance differed depending on what level the participant was in. Information for the regressions can be found in Tables 7 through 10.

	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.02	.00			
Intercept				1.65**	4.58
Adaptability composite				33	-1.52
Step 2	.20	.04	.04**		
Weak level				61**	-5.00
Moderate level				17	-1.37
Step 3	.21	.04	.00		
Adaptability composite x Weak level				10	-1.49
Adaptability composite x Moderate level				10	-1.43
**n < 01 * n < 05					

Table 7. Moderated regression of identify early signs of change and trait adaptability.

\*\*  $p \le .01, * p \le .05$
	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.00	.00			
Intercept				1.31**	3.31
Adaptability composite				.01	.04
Step 2	.17	.03	.03**		
Weak level				57**	-4.23
Moderate level				16	-1.20
Step 3	.17	.03	.00		
Adaptability composite x Weak level				.00	.02
Adaptability composite x Moderate level				02	23
** $p \le .01, * p \le .05$					

Table 8. Moderated regression for adjust to signs of change and trait adaptability.

Table 9. Moderated regression for initiate change and trait adaptability.

	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.01	.00			
Intercept				3.16**	7.35
Adaptability composite				.35	1.35
Step 2	.02	.00	.00		
Weak level				03	21
Moderate level				.01	.03
Step 3	.11	.01	.01*		
Adaptability composite x Weak level				.12	1.41
Adaptability composite x Moderate level				0.22**	2.67

\*\*  $p \le .01, * p \le .05$ 

	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.05	.00			
Intercept				3.64**	9.62
Adaptability composite				06	26
Step 2	.06	.00	.00		
Weak level				03	19
Moderate level				.01	.06
Step 3	.06	.00	.00		
Adaptability composite x Weak level				03	44
Adaptability composite x Moderate level				04	51
** $p \le .01, * p \le .05$					

Table 10. Moderated regression for explore new tools and approaches and trait adaptability.

In order to further explore this finding, a simple regression was conducted for each level of strength. The results, seen in Table 11, showed that in the strong level as trait adaptability increased, adaptive performance decreased. Although not significant, the moderate level was the only one of the three for which increases in trait adaptability was related to increases in adaptive performance. Figure 6 demonstrates this. This finding offered partial support for Hypothesis 2C because in the moderate level, those high in trait adaptability did demonstrate more adaptive performance than those low in adaptability for the initiating change dimension.

Contrary to what was expected participants high in trait adaptability demonstrated less adaptive performance in the strong situational strength level. This will be further explored in the discussion section.

*Table 11*. Regression results for predicting initiate change adaptive performance separately for each level of strength.

	Weak	Moderate	Strong
Intercept	3.23	3.27	3.26
Slope for trait adaptability	01	.09	13*
** $p \le .01, * p \le .05$			



*Figure 6*. Moderating effect of situational strength on trait adaptability-adaptive performance (initiate change dimension) relationship.

In an additional exploratory analysis, three more regressions were conducted to see whether strength moderated the trait adaptability-scenario composite relationship. None of the interaction terms were significant, as can be seen in Tables 12, 13, and 14.

	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.11	.01			
Intercept				2.97**	16.62
Adaptability composite				06	60
Step 2	.13	.02	.01		
Weak level				10	-1.65
Moderate level				10	-1.69
Step 3	.14	.02	.00		
Adaptability composite x Weak level				03	98
Adaptability composite x Moderate level				01	.15
** $p \le .01, * p \le .05$					

Table 12. Moderated regression for acquisition scenario and trait adaptability.

Table 13. Moderated regression for CEO scenario and trait adaptability.

	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.06	.00			
Intercept				2.93**	17.39
Adaptability composite				17	-1.63
Step 2	.14	.02	.02**		
Weak level				18**	-3.12
Moderate level				05	93
Step 3	.15	.02	.00		
Adaptability composite x Weak level				05	-1.46
Adaptability composite x Moderate level				03	-1.03
$p \le .01, p \le .05$					

	R	$R^2$	R <sup>2</sup> Change	b	t
Step 1	.10	.01			
Intercept				3.23**	18.93
Adaptability composite				.03	.29
Step 2	.14	.02	.01		
Weak level				09	-1.58
Moderate level				.03	.55
Step 3	.14	.02	.00		
Adaptability composite x Weak level				00	03
Adaptability composite x Moderate level				.03	.90
** $p \le .01, * p \le .05$					

Table 14. Moderated regression for technology scenario and trait adaptability.

#### DISCUSSION

This study aimed to test the idea that situational strength can help identify those who are higher on certain traits. More specifically, this study tested the idea that moderate levels of situational strength are ideal to separate those who have higher or lower levels of a trait (Marshall & Brown, 2006). The reason for this is that moderate situations provide the appropriate cues to signal to those who are higher in a trait that they need to exhibit certain behaviors. Those lower in the trait do not respond to the activation cues in the environment, and therefore are not triggered to exhibit the same behaviors. The moderate level of situational strength acts as a kind of "tipping point" or threshold, allowing enough flexibility in accepted behavior (Mischel, 1973) and trait-relevant cues (Tett & Guterman, 2000) that people's innate trait standing is demonstrated as an observable behavior.

#### **Dimension composites**

The results of this study offer some evidence to support these ideas. Trait adaptability was used as the trait of interest, and adaptive performance was the criterion. When testing the main effect of situational strength on adaptive performance, weak situations elicited less adaptive performance than moderate or strong levels of the manipulation. As expected, there was less adaptive performance in situations where it was not clear what the appropriate path of behavior is. Weak situations are not the appropriate place to differentiate between those who are high and low in adaptability, because the occurrence of adaptive behavior is small. More of the "action" in adaptive performance is in the moderate, and sometimes in the strong, levels of situational strength.

Although not tested in a hypothesis, moderate situations elicited a larger standard deviation in adaptive performance than did weak situations which indicates that there was more variation in responses under the moderate level. This is an important prerequisite to the idea that moderate levels of situational strength should show more variation than weak levels do. Previous researchers have posited just the opposite- that weak situations allow for more individual differences to manifest (Davis-Blake & Pfeffer, 1989; Meyer et al., 2011; Trimpop & Kirkcaldy, 1997). In some scenarios and for some traits, this is understandable. For example, one study found that there was more variance in extraversion when there was less situational press on the participants (Monson et al., 1982). In this case, participants are free to show their natural tendencies in a weak situation because there are no particular outcomes they are looking to accomplish. In addition to relying on weak situations, many existing studies do not include or make reference to trait-relevant cues (Tett & Guterman, 2000). Trait-relevance is important in selection for organizations because many of the cues candidates will be exposed on the job can be predicted, and therefore should be included in assessment tools to increase fidelity.

I argue that because adaptive performance is a goal-directed behavior at work (employees will exhibit adaptive performance that helps them succeed at their jobs, either immediately or in the future), weak situations without trait-relevant cues will not elicit adaptive performance. Weak situations without cues do not provide enough information for employees to see how their adaptive performance will be helpful. They may start on one course of action, only to get more information and later discover that their actions are essentially useless. There is a price to pay for exhibiting one's trait standing because the outcome is tied to performance.

There was additional support for the idea that the moderate level of situational strength is where we should look to see the most obvious differences between those high and low in

adaptability. For one of the adaptive performance dimensions, the moderate level of situational strength was the *only one* in which high adapters exhibited more adaptive performance than low adapters. The performance dimension was initiating change in the environment, shown when an employee proactively inserts change into his or her environment without being explicitly directed to do so. This finding supports the idea that for certain traits at work, moderate strength scenarios are where we should expect to see the greatest variation in behavior.

That being said, there were some counterintuitive findings regarding the strong level of situational strength. Strong levels of situational strength meant the documents in the in-basket explicitly stated which behaviors were desirable and expected. In these strong situations, the main effect of situational strength resulted in an even split in adaptive performance: for three of the dimensions, strong situations elicited the highest mean level of adaptive performance. But for the other two, strong situations elicited the lowest mean level. These differences were not significant, but they still tell an interesting story.

One possible explanation may be a nuance of how situational strength was conveyed in the documents. The strong strength documents made it clear when change was coming, and what a participant could do to make the adjustment to this change easier. The SJIs assessed whether a participant would take the necessary actions to make the transition smoother when the change did inevitably come. For example, the documents in the strong level of the CEO scenario explicitly stated that when the new CEO arrived, budgets would need to be reduced. The SJI then asked the participant if he wanted to learn how to reduce budgets now or leave it until later. The documents made it clear this would be a necessary skill soon in the future, but it was up to the participant about whether he wanted to leave the problem for later. It is possible that although the expected behavior was clear, some participants would choose to leave the issue to be resolved

when it is mandatory instead of just impending. This may have been compounded by the experiment's response instructions that asked participants to pick the behavior they were most likely to demonstrate, not the one that would get them promoted.

There may have been individual differences and predictors that contributed to participant's decisions to delay the inevitable, even when the course of action was clear. The construct of procrastination may be relevant here. It occurs when "when one delays beginning or completing an intended course of action", and can be brought on by task aversiveness, task delay, lack of self-efficacy, impulsiveness, and lack of conscientiousness (Steel, 2007; p. 66). The fact that the strong level documents had the highest standard deviation across performance dimensions could be interpreted as support for the influence of multiple factors on the decision to procrastinate; there are a number of individual differences and preferences that go into deciding whether one deals with impending change, thus there is a larger variation in behavior.

The influence of multiple factors may help explain another finding: for initiating change in the environment, those high in trait adaptability showed significantly less adaptive performance than those low in trait adaptability but only for strong situational strength. Situational strength moderated the trait-performance relationship but in the opposite direction as expected. It may be that there were other, unmeasured, individual differences that also moderated the relationship between trait adaptability and adaptive performance. However, many of the individual differences that would affect motivation or ability such as cognitive ability, selfefficacy, or conscientiousness, are related to trait adaptability (Burke et al., 2006; Griffin & Hesketh, 2003; 2005; Huang et al., 2014; Judge et al., 1999; LePine et al., 2000; Reder & Schunn, 1999; Ployhart & Bliese, 2006; Shoss et al., 2012) so they would be expected to operate in the same direction as trait adaptability.

An explanation that incorporates resources may better explain this finding. For the initiating change SJIs, the response that showed the most adaptive performance also required the greatest expenditure of time and resources. One example of a highly adaptive response option stated that the participant would reach out to companies to get datasets to use in a project that had been stalled. While this would have helped move the project forward, reaching out to companies was not required by the participant in her fictional job. It may be that those higher in trait adaptability are also wise about how they spend their limited time and attention. A participant who is placing herself in a hypothetical situation and thinking about her other job responsibilities may not want to be very proactive on one particular project. A low adapter on the other hand may not be as mindful as time and resources as he may not be initiating as many other endeavors that compete for time. He may then be more willing to spend the extra effort on this project because he does not have as many competing demands. This explanation would not suffice for the dimension of approaching change with a positive attitude but here, where being adaptive means giving up resources that may be needed elsewhere, a high adapter may be less willing to initiate change. To support this explanation, I would need to better understand what effect motivation played as opposed to ability. The difficulty of determining which of these, motivation or ability, had a greater impact is discussed more in the theoretical implications section.

Although not directly related to situational strength, participants higher in adaptability demonstrated more adaptive performance in this study. This was tested through established measures and composites of those measures, and the strongest relationship was between trait adaptability and approaching change with a positive attitude. High adapters were more accepting and enthusiastic of change than were low adapters. While I hypothesized that there would be

more significant relationships between the established trait adaptability measures and dimensions of adaptive performance, the relationships that were supported align with other findings in the organizational literature (Bateman & Crant, 1993; Ployhart & Bliese, 2006; Savickas, 2005). This should be taken as evidence that the self-report tools are useful in a selection context and may be used in lieu of more elaborate tools such as SJTs when there is not a strong theoretical reason to include contextualization. However, the usefulness of contextualized measures in certain circumstances is discussed more below.

#### Scenario composites

There were a number of exploratory analyses that utilized the scenario composites. There was little reason why these composites should have significant relationships with trait adaptability or strength and for the most part, none of the relationships were significant. The exception to this was the CEO scenario composite differing by level of strength with the adaptive performance increasing as level of strength increased. This finding supports the strength manipulation functioned correctly for this scenario. In the same vein, manipulation checks showed that for two of the scenarios the documents were most relevant in the weak level and the least relevant in the strong level. This means that when there was more ambiguity and less clear scripts for behavior, participants drew on the information they had available.

#### Theoretical implications and future directions

One of the primary conceptual implications of this study is that situational strength is still not well-understand. Intuitively, it appeals to researchers as an important influence on behavior. Although there is much discussion and several empirical tests of the importance of situational strength on behavior (Barrick & Mount, 2005; Cooper & Withey, 2009; Hough & Oswald, 2008;

LePine, Hollenbeck, Ilgen, Colquitt, & Ellis, 2002; Marshall & Brown, 2006; Meyer et al., 2009), it is still difficult to manipulate situational strength with much precision. The taxonomy of situational strength (Meyer et al., 2010) and the Situational Strength at Work scale, which measures situational strength in a specific work context (Meyer et al., 2011) are notable advances in clarifying what precise characteristics make for a weak or strong situation that can be uniformly interpreted.

However, there are improvements to be made on these advances. The four facet taxonomy is not easily applied in studies because the facets are difficult to separate. If someone is under high constraint, is it possible for her to also be under low clarity? Or by virtue of the constraints being clear, does the situation now have at least a moderate level of clarity? A researcher takes on quite of a challenge if he wishes to have a clean and easily interpretable manipulation of each facet. Coupled with this, the Situational Strength at Work scale can only be used in a self-report context in a field study, but cannot be translated to an experimental context where researchers are trying to parse specific effects. Underlying all of this, even if advances had been made to manipulate situational strength, the field has not decided on an effective way of deciphering whether people are perceiving the strength manipulation as intended. Are strength perceptions relative, or should a participant in a study be able to identify a stand-alone weak strength scenario? Would we expect a participant to respond differently if she sees all the levels of the manipulation as opposed to just one? Clearly there is still theoretical progress to be made to elucidate how uniform interpretations can be established. Progress on this front will have the dual outcomes of benefitting researchers who continue to look at when and under what conditions personality and situational characteristics interact to produce behaviors, as well as practitioners who wish to incorporate elements of situational strength into their work

environments, assessments, and development programs (Bowen & Ostroff, 2004; Schneider, Salvaggio, & Subirats, 2002).

Second, this study has implications for the conceptualization of adaptive performance. Here, I developed a novel conceptualization of adaptive performance that primarily assessed its behavioral components. However, adaptive performance has cognitive and affective components as well, such as using specific strategies or adopting a particular attitude when approaching change. In my SJIs there was a mix of behavioral, cognitive, and affective components but these were not separated and examined independently. I may have predicted different findings had I parsed adaptive performance into different components, and this would have required a different method of assessment than the one used in this study.

Related to idea of assessment, I created new items to measure adaptive performance for this study. The reason is that only one other study that I could find utilized an SJT for adaptive performance (Oswald, Schmitt, Kim, Ramsay, & Gillespie, 2004), but it was not possible to match their items to the scenarios used in this experiment because their items assessed college performance. This is reflective of a greater problem: there are not well-established measures of adaptive performance. Researchers use or develop their own which leads to inconsistency in how adaptive performance is measured, and makes it difficult to "establish empirical support for the structure of adaptive performance" (Baard et al., 2014; p. 11). While there will be times that researchers need to create new ways of measuring adaptive performance, such as in the present study, there should be a push to develop theoretically-driven and validated measures that can be used more broadly across this line of research.

A third implication is that the role of ability and motivation in trait adaptability needs to be further deconstructed. When interpreting the results of this study, there was not much published research that could guide the interpretation toward a problem with ability or a problem with motivation of the participants. Adaptability clearly requires both (Pulakos et al., 2000) but it is an empirical question as to whether one is more important than the other, and further if there are conditions where one can compensate for the lack of another. Future studies should identify these conditions.

Fourth, there were important assumptions underlying the use of adaptive performance in this study that should be brought to light. I assumed that more adaptive performance would result in higher job performance, and therefore be more desirable. This assumption may not hold in an applied setting. Employees who wait to change, and would be defined as more reactive in this study, may actually *benefit* from the delay; they may conserve resources, have a better understanding of the environment when they do act, or engage in other behaviors that lead to equal levels of performance as they would have if they were more proactive. The finding in this study that those high in adaptability exhibited less adaptive performance in strong situations hint that there not be a linear relationship between proactive adaptive performance and overall performance. The assumption that proactive adaptive performance needs to be tested, and this may mean that models other than the regression models used in this study would provide a more appropriate test of the ideas.

Lastly, further studies should also retest the ideas examined here using traits other than adaptability. There are two reasons for this: the first is that adaptability is evolutionarily-based. In the original TASS model that was used as a framework for this study, trait aggression was used because of its strong biological grounding (Marshall & Brown, 2006). The authors of this

model suggested that the model would only hold for other traits with a biological basis. This study continues the work of looking at traits that are evolutionarily based (Huang et al., 2014) but it is yet to be seen if these findings extent to traits that are less situated in an evolutionary perspective. The second reason another trait should be used in similar studies is that adaptability is not a well-understood or easily-measurable construct and may have muddied the situational strength manipulation. It is difficult to tell if there were not more significant results because the effect does not exist, or because measure adaptive performance is a difficult process. For clarity, future studies may consider using a trait that is better understood such as conscientiousness (Meyer, Dalal, & Bonaccio, 2009) while still examining moderate strength and trait-relevant situations.

#### **Practical implications**

The primary implication from this study is that there is some merit to including contextualization in assessments when making selection decisions. While it is possible to use self-report measures to understand work-relevant traits like adaptability, contextualized assessments offer a view to *the conditions* under which a candidate may exhibit certain traits. There is also supporting evidence that contextualized measures have greater criterion-related and face validity (Bing, Davison, & Smothers, 2014; Holtrop, Born, de Vries, & de Vries, 2014; Shaffer & Postlethwaite, 2012) though there are contradictory findings (Holtrop, Born, & de Vries, 2014). Contextualization can be of high relevance to organizations, especially when assessments are tailored to match the environmental circumstances present in the company. If a practitioner knows that changes happen infrequently as his company but when they do occur, it is vital that employees adapt quickly, he may be able to tailor a contextualized assessment to match

this reality and select employees that will perform well in an infrequent change but high stakes situation.

This is one the first studies to my knowledge that tests the idea that situational strength can aid in the prediction of certain behaviors specifically in a selection context. While assessment centers, situational judgment tests, and work samples often involve an organizational context or organizationally-relevant behaviors, there may be additional merit to contextualizing based on the *strength* of the environment. This may be applied to different job types, such as an autonomous, independent job where the employee is faced with a fairly "weak" situation but still needs to be productive. However, as stated above, there needs to be more work done on how exactly to manipulate the perception of strength before specific assessments can be designed.

Another, related implication is that when assessments are contextualized, a moderate level of situational strength with trait-relevant cues may be the optimal level to focus on (Marshall & Brown, 2006; Tett & Guterman, 2000). Many researchers have used weak strength situations to elicit variation in behavior with the explanation that when there are no rules or cues, people are free to express themselves. They have also neglected to include trait-relevant cues even though these cues can increase the variability of behavior by activating the trait in those who are on a higher standing of the trait. This study offers some support that for work-related behaviors, a slightly more directive context can offer more variation because candidates or employees have information on which to choose a course of action. This means that practitioners need to be include trait-relevant cues, and be very careful about how they conceptualize levels of strength. The difference between the often-used *weak level* and the recommended *moderate level* can be small, so extensive pilot testing will be needed for tools that utilize specific levels of situational strength.

The use of contextualization and levels of strength also means that practitioners must be mindful of ability to identify criteria (Konig, Melchers, Kleinmann, Richter, & Klehe, 2007) or ability to assess situational demands (Jansen et al., 2013). These two related constructs refer to a candidate's ability to understand what is required to behave effectively in a certain situation. In a selection context, this means the ability to identify the performance dimensions being rated. This ability to identify criteria explains significant variance in both assessment performance and job performance, and has implications for understanding the validity of contextualized tools such as assessment centers and structured interviews. Practitioners should give forethought to the effect of candidate's ability to understand the situation when designing or choosing selection tools and may even consider measuring candidate's skills in reading the situation (Kleinmann, 1993; Konig et al., 2007).

Lastly, this study has implications for practitioners who continue to explore novel ways to assess candidates. The method used in this experiment was a combination of an assessment center in-basket and an SJT. This allowed me to manipulate contextual characteristics while still understanding what behaviors participants were likely to exhibit in a given situation. This is one of the strengths of situational judgment tests: they capture context-dependent knowledge that is job-related. However, recent research has shown that the "contextualizing element", meaning the item stem, does not make a significant difference when it comes to scoring (Krumm et al., 2015; Rockstuhl, Ang, Ng, Lievens, & Van Dyne, 2015). Participants who received SJIs with and without item stems did not score significantly differently from one another. The conclusion was that instead of using contextual information, participants use general domain knowledge and comparative strategies among item responses when choosing answers (Krumm et al., 2015). This finding is disheartening for practitioners who spend time and resources creating fairly

elaborate situation descriptions in order to incorporate situational elements into assessment tools. In this study, participants *used* the contextualized documents (indicated by moderate means on manipulation checks), and had significantly different responses in different levels of strength, proving that the manipulations did work. The assessment method used here may offer a new path to practitioners who wish to retain an interactionist perspective in their tools.

However, there is still work to be done to examine what level of fidelity is best suited for manipulating situational strength. This study used situational judgment tests, which have fairly low fidelity and do not truly immerse the candidate. It is possible that situational strength would elicit more differences in behavior a high-fidelity situation, in which people have to act out their decisions instead of just indicate what they would theoretically do. As organizations increasingly move in the direction of simulations and video-based assessments, there is ample opportunity to explore whether high-fidelity scenarios are better suited to situational strength manipulations.

#### Limitations

There were several limitations to this study. The first was the extent to which participants noticed differences in the levels of situational strength. The manipulation check, used in each of the three scenarios, was not significantly different at different levels of strength. Although the mean ordering was as predicted for two of the scenarios, the manipulation was not strong enough to elicit significant differences in the manipulation check. If it had been stronger, it may have elicited more differences in adaptive performance. This can be traced back to the difficulty of effectively manipulating situational strength (Gulobovich, 2013). In order to ensure stronger manipulations, future studies should pilot test very extensively. The three groups of pilot testers were not sufficient in this study, so future studies may want to consider pilot testing two to three

times with subject matter experts before moving on to other groups of testers who have less experience with the construct of situational strength.

The second limitation was that this study used a student sample, many of whom likely did not have work experience. The scenarios and performance behaviors studied were specific to an organizational context and included changes (such as a corporate merger) that may have been unfamiliar to someone without work experience. While the concepts were simplified and clarity reviews were conducted with a student sample before the experiment was launched, the findings of this study would have higher ecological validity if a working sample was used. Future tests of these ideas may consider collecting data from a population who holds jobs.

The third limitation is that the materials used in this study were not designed according to best practices. Normally if a researcher or organization wants to create an assessment, he or she would conduct a job analysis and consult subject matter experts when creating the material. There were rationales for why this was not done for this study: there was no job or job family for this assessment on which to base a job analysis, and I created the content so that it aligned with my criteria and could be easily understood by a student population. In the future however, subject matter experts (possibly managers in an organization who have experienced a lot of changes) should generate the initial content if a working sample serves as participants.

While the primary goal of this study was to see if situational strength moderated the adaptability-performance relationship, another goal was to use a non-self-report method of assessing adaptability. In order to better understand whether the non-self-report measures used in this study had incremental validity, performance data would need to be collected. GPA and standardized test scores were collected from the student participants but these performance

measures do not necessarily give insight to adaptive performance. If the ideas tested in this study are later tested on a working sample, the researchers should also collect adaptive performance data to better understand if non-self-report is a superior method for assessing adaptability.

Lastly, this study did not allow me to look at within-person differences in responses to situational strength. I did not use a fully-crossed design in this study to avoid participant fatigue and boredom, but looking at how participants respond to different levels of strength may provide additional insight to how to successfully manipulate situational strength. It may also add to recent work on how individual differences affect how people perceive levels of strength (Jansen, Lievens, & Kleinmann, 2011; Mischel & Shoda, 1995), therefore furthering some of the goals posited in this discussion.

#### Conclusion

This study draws from different subfields of organizational, social, and personality psychology to test an idea that has implications for both researchers and practitioners. The results offer some support for the fact that situational characteristics evoke different behaviors from those high and low in adaptability. This has implications for the way the field measures individual differences and the inclusion of situational strength in assessment tools. The results and conclusions of this study will hopefully be used to further the field's understanding and use of situational strength in a selection context. APPENDICES

# **Appendix A: Full survey**

## Consent Form

You are being asked to participate in a research project. Researchers are required to provide a consent form to inform you about the study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

## Study Title: Assessments in Organizations

#### Researchers and Title: Dr. Ann Marie Ryan and Sarena Bhatia

Department and Institution: Department of Psychology, Michigan State University

## PURPOSE OF RESEARCH

• The intention of this study is to better understand how organizations can select employees using assessment tools that take situational context into effect.

## WHAT YOU WILL DO

- For this particular study, participants will be reading a number of correspondences and documents from an organization and answering multiple-choice questions.
- The survey should take approximately 20-30 minutes to complete, but there is no actual time constraint.

## **POTENTIAL BENEFITS**

• Participants will be given 1 research credit as compensation for their time.

## **POTENTIAL RISKS**

• The researchers do not foresee any risk pertaining to this questionnaire. If you do experience anxiety while participating in this study, you can discontinue participation at any time with no penalty to you. Also, regardless if you complete all the parts of the study or not, a list of free community resources will be provided to you.

## PRIVACY AND CONFIDENTIALITY

- Participant privacy is very important to us and will be protected to the maximum extent allowed by law. This includes complete confidentiality of participants' participation.
- Personal information that could identify participants will never be available to anyone other than the two primary researchers.
- All data gathered from this questionnaire will be kept on a password-protected computer and a secure network.

## YOUR RIGHTS TO PARTICIPATE, SAY NOM OR WITHDRAW

- Participation in this research project is completely voluntary, though you must be 18 to participate. You have the right to say no to participate.
- You may change your mind at any time and withdraw from participating in the study.
- You may choose not to answer specific questions or to stop participating at any time.

- There will be no consequences to you if you choose to withdraw from participating in this study.
- Choosing not to participate or withdrawing from this study will not make any difference in:
  - The quality of any services you may receive.
  - Benefits to which you are otherwise entitled.

## CONTACT INFORMATION FOR QUESTIONS AND CONCERNS

• If you have any questions or concerns about this study, you may contact the researchers at:

Dr. Ann Marie Ryan 333 Psychology Building Michigan State University East Lansing, MI 48824 ryanan@msu.edu (517) 353-8855	Sarena Bhatia 302 Psychology Building Michigan State University East Lansing, MI 48824 sbhatia@msu.edu
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• If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail <u>irb@msu.edu</u> or regular mail at 408 W. Circle Drive, 207 Olds Hall, MSU, East Lansing, MI 48824.

By completing the survey, I voluntarily agree to participate in this study:

Yes

No

Please read the following descriptions and documents carefully. There will be checks throughout the study to ensure proper attention.

#### Scenario 1: Company acquisition

#### Instructions

Imagine you are Devon Thompson, a website designer at Vistalee, Inc. Your job is to lead a group of designers in creating websites for clients. You have been working at Vistalee for a few years, and have to make some decisions based on what is currently going on at your company.

You will first read three documents. You will then be asked to answer five questions using your knowledge from the documents *and* what you would personally do if you were in this situation. Choose answers that make the most sense for you as an individual.

Please read the documents **carefully**, but you may refer back to them when answering the questions. It may help you to take a few small notes as you read.

#### **Attention check**

What is your job?

- a. Paralegal
- b. Vice president
- c. Website designer
- d. Social worker

Where do you work?

- a. Vistalee, Inc.
- b. Verizon Companies

Your name is Devon Thompson and you work at Vistalee, Inc. as a website designer. This exercise will require you to pay very close attention to the material in the following documents. Please read slowly and thoroughly.

*Figure 7*. Company acquisition, meeting email – weak.

# **Devon Thompson**

From: Devon ThompsonTo: alice.odon@vistalee.comCC: chris.mead@vistalee.com, maria.canon@vistalee.comSent: Monday, March 17, 11:50 AMSubject: Meeting on Monday

Alice,

Are we still on for Monday? I've put the final touches on the presentation and sent it over to Christy to make some copies.

Best, Devon

# Devon Thompson



From:Alice O'Donnell [alice.odon@vistalee.com]To:devon.thompson@vistlee.comSent:Tuesday, March 18, 3:42 PMSubject:RE: Meeting on Monday

Hi Devon,

Yes, please book the conference room for the Monday meeting. I may be running a little late, we have this meeting about some changes that may be going on at Vistalee but it should not hold me up for too long. The meeting is across the street so I will run over right after. Worst case you'll have to start without me.

At our next meeting, we should talk about what you have been working on. I know I've been busy and have not had much time to give you feedback on your projects but we should review your progress. Thanks. Figure 8. Company acquisition, meeting email – moderate.

# **Devon Thompson**

From: Devon ThompsonTo: alice.odon@vistalee.comCC: chris.mead@vistalee.com, maria.canon@vistalee.comSent: Monday, March 17, 11:50 AMSubject: Meeting on Monday

Alice,

Are we still on for Monday? I've put the final touches on the presentation and sent it over to Christy to make some copies.

Best, Devon

# Devon Thompson



From:Alice O'Donnell [alice.odon@vistalee.com]To:devon.thompson@vistlee.comSent:Tuesday, March 18, 3:42 PMSubject:RE: Meeting on Monday

Hi Devon,

Yes, please book the conference room for the Monday meeting. I may be running a little late, I am meeting with one of the people over at that small web design company we met with a while back. We are meeting to discuss whether they can handle part of our product design work from now on. Not too sure what is going on but worst case you'll have to start without me.

There may be some implications for both of us if this company does take over some design work, in terms of our time and responsibility. We can talk about this more when we meet next. Thanks.

Figure 9. Company acquisition, meeting email – strong.

# **Devon Thompson**

From: Devon ThompsonTo: alice.odon@vistalee.comCC: chris.mead@vistalee.com, maria.canon@vistalee.comSent: Monday, March 17, 11:50 AMSubject: Meeting on Monday

Alice,

Are we still on for Monday? I've put the final touches on the presentation and sent it over to Christy to make some copies.

Best, Devon

## Devon Thompson

devon.thompson@vistlee.com (501) 892-3947 Vistalee, Inc. Moving you forward

From:Alice O'Donnell [alice.odon@vistalee.com]To:devon.thompson@vistlee.comSent:Tuesday, March 18, 3:42 PMSubject:RE: Meeting on Monday

Hi Devon,

Yes, please book the conference room for the Monday meeting. I may be running a little late, I am meeting with one of the people over at InnoWeb Designs, a small web design company, to talk about our acquisition of their company and make sure they are ready to take on some of our clients. Worst case you'll have to start without me.

You and I should also set up a meeting to talk about how we will train InnoWeb Design's people after the acquisition. We will be in charge of getting them up to date with our policies and procedures, so please set aside some time in your calendar for these trainings over the next few weeks. I am hoping it won't subtract too much from your project time. Thanks.

Figure 10. Company acquisition, note – weak.

Hey Devon,

I know you asked my marketing team for a mock-up of the new design work, and I am working on it. I was told there may be some changes with how the design work is done. We are still negotiating to understand if this affects the way we can distribute material like mock-ups. Sorry to hold you up, but I will keep you updated as I hear more!

- Karim

Figure 11. Company acquisition, note - moderate.

Hey Devon,

I know you asked my marketing team for a mock-up of the new design work, but I don't have it. Our team is now involved with a new web design company that needs to sign off on the licensing. I probably can't give you the mock-ups until I get clearance. You may still be able get around these constraints if you talk to the graphic designers and see if they can help. Sorry to hold you up, but I will keep you updated as I hear more!

- Karim

Figure 12. Company acquisition, note – strong.

Hey Devon,

I know you asked my marketing team for a mock-up of the new design work, but I am afraid you cannot have it. You may have heard we are acquiring InnoWeb Designs, so their people need to see the design work before it can be distributed. I can't give you the material you need for your project. I understand this holds up your current project. You will also need to meet with their team before I can distribute any content to you. Sorry to hold you up, but I will keep you updated as I hear more!

- Karim

Figure 13. Company acquisition, law email – weak.



Vistalee, Inc. Corporate Headquarters 459 Southway Drive Little Rock, AR 72201 Email: contact@vistalee.it.com Fax: (501) 892-2938

February 13, 2014

Brock, Johnson, and Latinski South Law Offices 294 Lark Avenue Little Rock, AR 72201

Dear Mr. Brock,

Thank you very much for meeting with me. My company urgently needs a legal team with whom to consult. It is important that we meet with you again soon.

Although my company is undergoing changes, I do not expect the change will affect our current employees. We would still like to seek your legal counsel. It would be helpful to have some specific information about how local laws will affect our department before we start this process.

Our executive board has several higher-priority concerns right now, so I am unsure of when our next meeting will be. I will get in touch when I have a better idea of when we could next meet. I look forward to speaking with you.

Sincerely, Whitney Washington

Whitney Washington Senior Vice President of Human Resources Vistalee, Inc. *Figure 14.* Company acquisition, law email – moderate.



Vistalee, Inc. Corporate Headquarters 459 Southway Drive Little Rock, AR 72201 Email: contact@vistalee.it.com Fax: (501) 892-2938

February 13, 2014

Brock, Johnson, and Latinski South Law Offices 294 Lark Avenue Little Rock, AR 72201

Dear Mr. Brock,

Thank you very much for meeting with me. I would like to set up another meeting sometime in the next month because our company urgently needs a legal team with whom to consult. It is important that we meet with you as soon as possible.

Because my company is undergoing some major changes, there may also be some changes for our employees in regards to their pay and pensions, so we would like some guidance around state employment laws. We will have to pay our employees much less than we do now.

I will have my administrative assistant get in touch with you in the next few months about coordinating another meeting. I look forward to speaking with you.

Sincerely, Whitney Washington

Whitney Washington Senior Vice President of Human Resources Vistalee, Inc. Figure 15. Company acquisition, law email – strong.



Vistalee, Inc. Corporate Headquarters 459 Southway Drive Little Rock, AR 72201 Email: contact@vistalee.it.com Fax: (501) 892-2938

February 13, 2014

Brock, Johnson, and Latinski South Law Offices 294 Lark Avenue Little Rock, AR 72201

Dear Mr. Brock,

Thank you very much for meeting with me last week about our acquisition of InnoWeb Designs. Our company urgently needs a legal team with whom to consult as these changes start taking place. It is important that we meet with you soon.

I will have shareholders who are involved with the acquisition attend our next meeting. We would also like to talk about the implications for our employees at Vistalee- it is very likely that the acquisition will result in the firing of some of our staff, simply because we cannot support a workforce as large as the current one. We need to seek legal counsel before moving forward with terminations.

I will have my administrative assistant get in touch with you this week about coordinating another meeting. I look forward to speaking with you.

Sincerely,

Whitney Washington

Whitney Washington Senior Vice President of Human Resources Vistalee, Inc.

## **Attention check**

Who is the vice president, Whitney Washington, trying to meet with?

- a. A manufacturing company
- b. A legal team
- c. A group of students
- d. The information technology team

Of what do you (Devon) want a mock-up from Karim?

- a. Business cards
- b. Web search
- c. Design work
- d. Blueprints

## Items

Imagine you are Devon, a website designer at Vistalee, Inc., and had just read those three documents. Using your knowledge from the documents *and* what you would personally do if you were in this situation, please answer the following questions. Choose answers that make the most sense for you as an individual, not necessarily what will get you promoted in the company.

A close friend who you work with asks you if you feel things are different around Vistalee. How do you respond? (*identifying signs of change*)

- a. Say you have not really noticed much difference, the company seems the same as usual. *(least adaptive)*
- b. State that it seems like some changes are going on, but nothing more- you have a hunch but no solid proof.
- c. Mention that you have had a few conversations and interactions that make it seems like there will be changes around the company.
- d. Tell your friend about the specific pieces of information that make you think there is a change happening, and ask your friend if he or she has heard anything similar.
- e. State pretty confidently what change is happening and who is involved- the signs have been clear and you want to keep your friend informed. *(most adaptive)*

Your supervisor says there may be changes to the way things are done around Vistalee in the coming months. What do you do? (*adjusting to signs of change*)

- a. Continue with your projects so you can meet your deadlines- no one is sure there will be changes, so it does not help you to do anything until you know more. (*least adaptive*)
- b. Listen attentively for announcements from your supervisor or upper management so that you are one of the first to know if there will be changes.

- c. Use the information from your recent conversations to guess what changes may occur and mentally start preparing for modifications to your work routine.
- d. Ask your coworkers what information they have about the changes, and discuss possible changes with them to build your social support network.
- e. After gathering all the information you can, start making small changes in your work routine in preparation for the larger changes that are coming. *(most adaptive)*

Some of your coworkers are talking changes that are going on around Vistalee. There is some dissatisfaction because some changes require people to work on new teams with unknown team members, or learn new skills that have not been needed before. How do you react? *(exhibiting attitude toward change)* 

- a. You agree with your coworkers. You want to share your own story of how change has made your life harder to help them feel that they are not alone in their frustration. (*least adaptive*)
- b. You have not experienced much trouble in your role, but your coworkers' conversation makes you uneasy that you may be asked to work with strangers or learn difficult new skills soon too.
- c. You understand that this "water cooler talk" is a good way for people to get their frustrations out, so you do not think much more about what they are saying.
- d. You see where your coworkers are coming from, but you do not think the changes will make your job that much worse.
- e. You understand why people are frustrated, but you are also a little excited to see what new skills you are asked to learn- they may actually make your job easier. (*most adaptive*)

There is a new group of people that may be joining your team in a few months. What do you do? *(initiating change)* 

- a. Be alert for a message from your supervisor about new team members, but continue work as usual. (*least adaptive*)
- b. Make sure all your team's projects are up to date so if there are new additions, there will not be any confusion.
- c. Spend some time putting together a few informational documents to distribute if they are needed.
- d. Talk to your supervisor about new projects that would be possible if more teammates were available for support.
- e. Get your team involved in creating an orientation so that new members can learn the basics quickly if they join the team. (*most adaptive*)

There is a small local company that has an innovative approach to web design. It is cutting edge but learning the new design is challenging and time-consuming. You are very familiar with the

way your company currently designs web pages. What do you do? (*exploring new approaches, tools, and technologies*)

- a. Stay focused on your work- your company's approach to design works well for your customers, and you are an expert at creating quality products with it. *(least adaptive)*
- b. Stay tuned in to see whether the local company plans to create a more user-friendly version to do the new web design in the future.
- c. Ask around to see if any of your colleagues have experience with this new approach.
- d. Sign up for the introductory course the local company offers on their new approach to gain some exposure and see if it is something worth pursuing.
- e. After getting clearance from your supervisor, sign up for the full certification for the new approach to web design even though it requires giving up part of your weekend. (*most adaptive*)

To what extent did the information in the three documents help you make decisions when answering the five questions?

- a. To a great extent
- b. Somewhat
- c. Very little
- d. Not at all

## Scenario 2: New CEO

## Instructions

Imagine you are Jamie Lopez, a marketing analyst for Tetra Health which is a large consumer healthcare company. As a marketing analyst, you work at the headquarter offices and are in charge of conducting analyses on large datasets to help the company decide where to launch new products, and what an appropriate price for these products is.

You will first read three documents. You will then be asked to answer five questions using your knowledge from the documents *and* what you would personally do if you were in this situation. Choose answers that make the most sense for you as an individual.

Please read the documents **carefully**, but you may refer back to them when answering the questions. It may help you to take a few small notes as you read.

## **Attention check**

What is your job?

- e. Paralegal
- f. Marketing analyst
- g. Website designer
- h. Pet trainer

Where do you work?

- c. Taragon Incorporated
- d. Tetra Health

Your name is Jamie Lopez and you work at Tetra Health as a marketing analyst. This exercise will require you to pay very close attention to the material in the following documents. Please read slowly and thoroughly.

Figure 16. New CEO, announcement – weak.



# **Official Announcement**

Disruptions in headquarter office

Over the next few weeks, there will be more activity than usual in the headquarter office. We will be having a number of executives visiting. Please excuse any disruptions such as more people around the office than usual. We appreciate your cooperation.


Figure 17. New CEO, announcement – moderate.



# **Official Announcement**

## Disruptions in headquarter office

Over the next few weeks, there will be more activity than usual in the headquarter office. We are hiring for open positions in our upper management, specifically the executive board. There will likely be a lot of changes to the way the company is run with new executive board members. Please excuse any disruptions such as higher levels of crowds and over-booking of rooms. We appreciate your cooperation.



Figure 18. New CEO, announcement – strong.



# **Official Announcement**

## Disruptions in headquarter office

Over the next few weeks, there will be more activity than usual in the headquarter office. The company is hiring for a new CEO as our current one is retiring soon. A new CEO means a lot of changes around the company, especially in the way budgets are reviewed and approved. Please excuse any disruptions. The office will be very busy, and it is unlikely anyone will be able to book rooms for meetings, but we appreciate your cooperation.



Figure 19. New CEO, messenger – weak.



Figure 20. New CEO, messenger – moderate.



Figure 21. New CEO, messenger – strong.



Figure 22. New CEO, email – weak.

----Original message-----

From: Mario Guerra [TH] Sent: 1 Nov 2:40 PM To: jlopez21@its.tetra.org Subject: Progress on project?

## Hello Jamie,

I was wondering what your plans were to push forward on that project we have been working on. I know this was not a top priority so if you have stopped working on it because you have been busy, I totally understand. I just had not heard from you in a while and wanted to check in.

Best, Mario

### Mario Guerra

Administration systems manager cell: (598) 829- 92648 email: mguerra34@its.tetra.org

## **Re: Progress on project?**

Sent: 08 Nov 8:05 AM To: Mario Guerra (mguerra34@its.tetra.org) From: Jamie Lopez [TH]

Hi Mario,

Sorry for being so out of touch. I have been trying to move the project forward, but I have run into a lot of problems. You know how things are around here can be- there are so many rules for every little thing that is hard to make progress. There is so much structure that it gets in the way sometimes. I will let you know when I hear back.

Thanks for your patience, Jamie Figure 23. New CEO, email – moderate.

----Original message----From: Mario Guerra [TH] Sent: 1 Nov 2:40 PM To: jlopez21@its.tetra.org Subject: Progress on project?

## Hello Jamie,

I was wondering what your plans were to push forward on that project we have been working on. We had already put a fair amount of time and effort into the project, so I think it would make a lot of people look bad if we dropped the project entirely. I just had not heard from you in a while and wanted to check in.

Best, Mario

#### Mario Guerra

Administration systems manager cell: (598) 829- 92648 email: mguerra34@its.tetra.org

## **Re: Progress on project?**

Sent: 08 Nov 8:05 AM To: Mario Guerra (mguerra34@its.tetra.org) From: Jamie Lopez [TH]

Hi Mario,

Sorry for being so out of touch. I have been trying to move the project forward, but I have been running into difficulties because of some changes going on in the organization on the executive board. I have emails out to a few different people, and meetings set up for next week to discuss this. I will let you know when I hear back.

Thanks for your patience, Jamie Figure 24. New CEO, email – strong.

----Original message----

From: Mario Guerra [TH] Sent: 1 Nov 2:40 PM To: jlopez21@its.tetra.org Subject: Progress on project?

Hello Jamie,

I was wondering what your plans were to push forward on that project we have been working on. This is a really important project for a lot of people. With promotion decisions coming up, I want us to have made progress so the people on our team do not look like poor performers. These people are depending on us. I just had not heard from you in a while and wanted to check in.

Best, Mario

## Mario Guerra

Administration systems manager cell: (598) 829- 92648 email: mguerra34@its.tetra.org

## **Re: Progress on project?**

Sent: 08 Nov 8:05 AM To: Mario Guerra (mguerra34@its.tetra.org) From: Jamie Lopez [TH]

Hi Mario,

Sorry for being so out of touch. I have been trying to move the project forward, but I have been running into difficulties because of the new CEO that will be taking over Tetra. The new CEO is implementing a lot of strict rules in regards to budget, so it has been hard for me to get clearance. It has pretty drastically changed the working environment. I will let you know when I hear back.

Thanks for your patience, Jamie

#### Attention check

What is happening in headquarters?

- a. There is construction on part of the building
- b. There will be more people around for a few weeks
- c. There was a robbery
- d. The building will be closed for several months

Did you (Jamie) submit the paperwork?

- a. No, you were told you did not need to
- b. No, you could not find the administrator
- c. Yes, you successfully submitted
- d. Yes, with the required changes Klaudia asked for

#### Items

Imagine you are Jamie, a marketing analyst for Tetra Health had just read those three documents. Using your knowledge from the documents *and* what you would personally do if you were in this situation, please answer the following questions. Choose answers that make the most sense for you as an individual, not necessarily what will get you promoted in the company.

A close friend who you work with asks you if you feel things are different around Tetra Health. How do you respond? (*identifying signs of change*)

- a. Say you have not really noticed much difference, the company seems the same as usual. *(least adaptive)*
- b. State that it seems like some changes are going on, but nothing more- you have a hunch but no solid proof.
- c. Mention that you have had a few conversations and interactions that make it seems like there will be changes around the company.
- d. Tell your friend about the specific pieces of information that make you think there is a change happening, and ask your friend if he or she has heard anything similar.
- e. State pretty confidently what change is happening and who is involved- the signs have been clear and you want to keep your friend informed. (*most adaptive*)

You are asked to create a preliminary budget for a new project. What do you do? (*adjusting to signs of change*)

- a. Follow the same exact model you usually do, with the same cost estimates. This model has served you well, and you want to give the budget to your manager quickly. *(least adaptive)*
- b. Have the budget that is similar in size to what you have turned in previously, but write a note to your manager to look over it and confirm.
- c. Check with your team members to see how they have been creating budgets recently, and follow whatever advice they give you.
- d. Form a budget that is close to what you normally create with a few built-in safeguards in case the total budget needs to be reduced before it can be cleared.
- e. Create a budget that is smaller than you normally would so that you are prepared for any problems you run into for having too large of a budget. *(most adaptive)*

You try to book a room in headquarters for an important meeting only to find that none of them are available. The administrative assistant tells you it is due to the high number of executives in town right now. How do you react? (*exhibiting attitude toward change*)

- a. You are a little annoyed that there are no available rooms. This is an important meeting and there are not a lot of other buildings to book rooms. *(least adaptive)*
- b. It is a big inconvenience but you thank the assistant and hope someone on your team may know of an alternative place to book.
- c. You are surprised there are no rooms as it is a big building, but you start thinking of other places where you may be able to hold the meeting.
- d. You feel inconvenienced but you know it is important for the company's future that the visitors feel welcomed to the company, so you do not dwell much.
- e. Although it makes holding the meeting difficult, you understand that there are important changes going on at Tetra that require you to be flexible. (*most adaptive*)

Your most recent budget proposal for the project you and Mario are working on is denied. You are told that there is a new product that Tetra is considering releasing but until that is decided, your project cannot be approved because no new data is being collected. When the decision on that product is made, your proposal to collect new data will automatically be reconsidered. What do you do? *(initiating new change)* 

- a. Tell your team the bad news, and dedicate full effort to other projects you have going on so that you more time to work on this one if it is reconsidered. *(least adaptive)*
- b. See if you can talk to someone in product development to find out a rough timeline for when the new product decision will be made.
- c. Look through the datasets you have to see if there is new information or insights you can get out them, even though you have used those datasets several times already.
- d. Have a meeting with your team to see if anyone has ideas about how to get new data while you wait, and consider executing a few good ideas that come up.

e. Although it has never been done before, you get in touch with companies to see if they have datasets you may be able to use while you wait to be reconsidered. (*most adaptive*)

A few weeks in the future, a member of your team has to file similar paperwork to what you and Adam thought you needed to file. She mentions that the paperwork process has changed and it has been moved online. What do you do? (*exploring new approaches, tools, and technologies*)

- a. The online systems at Tetra are pretty slow and hard to use, so you decide that if you do need to file that paperwork in the future you will ask someone help you so that the process is still efficient. (*least adaptive*)
- b. Figure you may not need to file that paperwork again soon, so you wait to become familiar with system until you need to use it, in case it changes in the meantime.
- c. Write yourself a reminder to ask your team member about the filing process after she goes through it the first time.
- d. Talk to the administrative assistant and see if she can send you screenshots of the online system so you have some exposure to it.
- e. Ask your team member if you can watch her file on the online system so that you are familiar with it when you need it next. *(most adaptive)*

To what extent did the information in the three documents help you make decisions when answering the five questions?

- a. To a great extent
- b. Somewhat
- c. Very little
- d. Not at all

#### Scenario 3: New technology

#### Instructions

Imagine you are Wei Chang, a sales specialist working at EmployeeTrack. EmployeeTrack is the creator and provider of a popular employee database software that many companies use to manage their employee's information and payroll. As a specialist, you help your clients understand how EmployeeTrack's software can streamline record-keeping.

You will first read three documents. You will then be asked to answer five questions using your knowledge from the documents *and* what you would personally do if you were in this situation. Choose answers that make the most sense for you as an individual.

Please read the documents **carefully**, but you may refer back to them when answering the questions. It may help you to take a few small notes as you read.

#### Attention check

What is your name?

- i. Wei Chang
- j. Walt Can
- k. Lei Kim
- l. Dan Chan

Where do you work?

- e. Emerging Leaders for You, LLC
- f. EmployeeTrack

Your name is Wei Chang and you work at EmployeeTrack as a sales specialist. This exercise will require you to pay very close attention to the material in the following documents. Please read slowly and thoroughly.

Figure 25. New technology, email - weak.

-----Original Message-----

From: Wei Chang To: ibrown@employeetrack.org Sent: Tuesday, 21 Sept 7:34 AM Subject: Client information

Hello Isabella,

We are about to get to the negotiation stage with the client I have been working with and they want to know a little more about the technical specs. I know there were some changes to these things recently. I haven't gotten the chance yet to go through the new information, but will when I have time. Thanks in advance.

Sincerely, Wei

EmployeeTrack, Sales specialist wchang@employeetrack.org 33 Bridgewater Av., Office 5 Denver, CO 80211

## **Re: Client information**

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Wei,

Sorry for the delayed response. I know you had asked for some specific information for a client you are handling. Right now the platform that we are using is undergoing some changes, so I won't be able to get that information to you for a while. We have to get one big thing cleared up before I know anything else.

Thanks for your patience. Isabella Figure 26. New technology, email – moderate.

-----Original Message-----

From: Wei Chang To: ibrown@employeetrack.org Sent: Tuesday, 21 Sept 7:34 AM Subject: Client information

Hello Isabella,

We are about to get to the negotiation stage with the client I have been working with for the past few weeks, and they want to know a little more about the technical specs. I know with the new platform some of this is still being worked out. I got an email about needing to review some of the new information with a technology specialist so I should be more up to date soon. Thanks in advance.

Sincerely, Wei

EmployeeTrack, Sales specialist wchang@employeetrack.org 33 Bridgewater Av., Office 5 Denver, CO 80211

## **Re: Client information**

From:	Isabella Brown [ibrown@employeetrack.org]
To:	wchang@employeetrack.org
Sent:	Monday, 27 Sept 10:02 AM
Subject:	RE: Client information

Wei,

Sorry for the delayed response, things have been busy over here. I know you had asked for some specific information for that pretty important client you are handling. You have probably heard how big the changes are for the new platform. Everything is being transferred little by little, so some of the specifications you asked for will be changing. I will send you the new documents once we have them.

Thanks for your patience. Isabella Figure 27. New technology, email - strong.

-----Original Message-----

From: Wei Chang To: ibrown@employeetrack.org Sent: Tuesday, 21 Sept 7:34 AM Subject: Client information

Hello Isabella,

We are about to get to the negotiation stage with the client I have been working with for the past few weeks, and they want to know a little more about the technical specs of the new platform. I know these are basic questions but I want to double check because so much of this information has changed with the new platform. I haven't gone through the formal training they scheduled me for yet. Thanks in advance.

Sincerely, Wei

EmployeeTrack, Sales specialist wchang@employeetrack.org 33 Bridgewater Av., Office 5 Denver, CO 80211

## **Re: Client information**

From:	Isabella Brown [ibrown@employeetrack.org]
To:	wchang@employeetrack.org
Sent:	Monday, 27 Sept 10:02 AM
Subject:	RE: Client information

Wei,

Sorry for the delayed response, things have been crazy over here with the platform transfer. I know you had asked for some specific information for your client (and I also know your client can be difficult to handle, so I know this request is urgent). As you know, we just transferred all of our software to a new technology platform. This means we have had to reconfigure a lot of aspects of the employee database software. Right now we are looking into the extent to which

this new platform for the software can support mobile capabilities. I will send you the new documents, and you should go through the formal training as soon as you can.

Thanks for your patience. Isabella Figure 28. New technology, announcement – weak.



Figure 29. New technology, announcement – moderate.



*Figure 30*. New technology, announcement – strong.



Figure 31. New technology, voicemail – weak.

Hi Wei, it's your boss Sheila. You have probably heard something about the changes with this new platform. I just wanted to give you a heads up that there will be some training associated with the move over, but you can go through it when you have the time. It's not a big deal if it takes you a while, I know you have a lot of project work to take care of. The training is really more for those people who want to be on the cutting-edge of what's going on. Anyways, just thought I would let you know. Talk to you tomorrow.

Figure 32. New technology, voicemail – moderate.

Hi Wei, it's your boss Sheila. By now you have heard about the switch of our software to the new platform. There is a training that is associated with the move- you will need to go through it sooner rather than later. All of the other employees will have done it so if you haven't, it is going to show in terms of your performance and ability to be on the same level as everyone else. Anyways, just wanted to give you that reminder. Talk to you tomorrow.

Figure 33. New technology, voicemail – strong.

Hi Wei, it's your boss Sheila. I know you have been hearing a lot about how our employee software has switched to be on a new platform. You have gotten a couple of emails about the mandatory training to learn about the new platform. I was told you haven't been through it yet- it is really important that you do this ASAP. Anyone who doesn't complete the training in the next few days will be considered on probation, and your future with this company will be under question. Take care of this soon please. Talk to you tomorrow.

#### Attention check

What has EmployeeTrack just received that is affecting the software?

- a. A training program
- b. A new computing platform
- c. A legal issue
- d. A group that negotiates

Why did you (Wei) need to know about technical specifications? You were:

- a. Building a new software
- b. Redesigning a platform
- c. Negotiating with a client
- d. Creating a financial document

#### Items

Imagine you are Wei, a sales specialist working at EmployeeTrack, and had just read or listened to those three documents. Using your knowledge from the documents *and* what you would personally do if you were in this situation, please answer the following questions. Choose answers that make the most sense for you as an individual, not necessarily what will get you promoted in the company.

A close friend who you work with asks you if you feel things are different around EmployeeTrack. How do you respond? (*identifying signs of change*)

- a. Say you have not really noticed much difference, the company seems the same as usual. *(least adaptive)*
- b. State that it seems like some changes are going on, but nothing more- you have a hunch but no solid proof.
- c. Mention that you have had a few conversations and interactions that make it seems like there will be changes around the company.
- d. Tell your friend about the specific pieces of information that make you think there is a change happening, and ask your friend if he or she has heard anything similar.
- e. State pretty confidently what change is happening and who is involved- the signs have been clear and you want to keep your friend informed. (*most adaptive*)

In order to be up to date with the changes with the platform that hosts the employee database software, employees can go through a training. Your schedule is pretty full at this time of the year. What do you do? (*adjusting to signs of change*)

- a. Stay focused on your clients so that you can do your job well- your boss is good at letting you know when it is mandatory to complete these kinds of trainings. *(least adaptive)*
- b. Keep working on your current projects, but keep an eye out for an open spot on your calendar where you may be able to go through the training.
- c. After a few members of your team have been through the training and say it does not take too long, sign up for training.
- d. Say you will attend the training pretty soon after it is announced so you can stay up to date.
- e. Be one of the first employees to sign up for training because you like to be at the forefront of whatever is new in the company. (*most adaptive*)

Some of your fellow sales specialists have been complaining about having to learn a lot of new information because of the new platform. Some have been getting pressure from their bosses about the new trainings required. How do you react? (*exhibiting attitude toward change*)

- a. It is usually frustrating or annoying when big changes like this occur in your workplace, so you take out your frustration along with your coworkers. *(least adaptive)*
- b. You can relate about needing new information to share with clients and getting calls from your boss, so you share your own stories with your coworkers.
- c. You have had some similar problems, but you also have other concerns to worry about so you do not pay much attention to your coworkers' conversations.
- d. You do not say much to your coworkers- the changes are inconvenient but in the end they will make the company more efficient, so you accept them.
- e. You do not get involved in the conversation because in the end these changes will make the company better and may even make your job easier. (*most adaptive*)

Because of the changes with the platform, some of the paperwork you give to clients needs to be edited. What do you do? *(initiating change)* 

- a. Talk to the administrators about when they will be able to create new paperwork so you have an estimated timeline. (*least adaptive*)
- b. Make the changes by hand to any paperwork you have to give to clients before new paperwork is created because everyone is really busy.
- c. Put together a list of the specific changes that need to be made, and share it with your team to see if they agree.
- d. Create a new form that is similar, but has the required changes, and send it to your team in case they want to use it.
- e. Download a version of the paperwork that can be edited, make the changes, and send the new paperwork to the administrators to review and post to the form folder. (*most adaptive*)

The changes to the platform have created some new capabilities that you can offer to clients. One new feature is the ability to have the software automatically create reports about the employees in the software's system. This feature is difficult to learn. What do you do? (*exploring new approaches, tools, and technologies*)

- a. Continue offering the services you know to your clients- you do not want to offer them something that you or very few people know how to use appropriately. *(least adaptive)*
- b. Ask your team members if they have learned to use this feature and if they have, get their opinion on how useful it is.
- c. See if any of your clients are interested in the new tool before spending too much time learning about it.
- d. Search for a quick guide for the new feature so that you have some working knowledge about the tool, and can talk to clients about it.
- e. Find a manual from the software developers that teaches you how to use the new tool, and become proficient in it. New tools are interesting to you. *(most adaptive)*

To what extent did the information in the three documents help you make decisions when answering the five questions?

- a. To a great extent
- b. Somewhat
- c. Very little
- d. Not at all

-----The Proactive Personality Scale and I-ADAPT measure were inserted here in the study, and the order of the two scales was randomized------

- 1. What is your HPR number or MSU ID (the first half of your MSU email) so you can receive credit?
- 2. What is your ACT composite score? (Should be between 1 and 36. Highest if took test more than once. Write N/A if not applicable) \_\_\_\_\_
- 3. What is your SAT critical reading score? (Should be between 200 and 800. Highest if took test more than once. Write N/A if not applicable) \_\_\_\_\_
- 4. What is your SAT math score? (Should be between 200 and 800. Highest if took test more than once. Write N/A if not applicable) \_\_\_\_\_
- 5. What year are you considered in school, credit-wise?

- Freshman Sophomore Junior Senior Other \_\_\_\_\_
- 6. What is your current cumulative college GPA?
  - less than 2.00 2.00 to 2.29 2.30 to 2.59 2.60 to 2.89 2.90 to 3.19 3.20 to 3.49 3.50 to 3.79 3.80 to 3.99 4.00 I am in my first semester
- 7. What is your age? \_\_\_\_\_
- 8. What is your gender? Male Female
- 9. Is your ethnicity Hispanic/Latino? Yes No
- 10. If your ethnicity is not Hispanic/Latino please select your race below (may select more than one):

American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White Other \_\_\_\_\_

11. If you have any comments about this study that you would like shared with the researcher, please write them below.

Please remain seated so that you can be debriefed at the end of the session. Please do not use your phone during this time.

#### Debrief Form

#### Adaptability in Organizations Study

Thank you very much for participating in our study. Below you will find more information about the purpose of this study as well as a list of counseling and informational resources.

The purpose of this study is to determine whether characteristics of a situation can affect how much adaptability a person shows. The researcher wants to see if weak, moderate, or strong situations have an effect on how adaptable people are at work. A weak situation is one in which it is not clear how one should behave. A strong situation is one in which it is very clear how one should behave. A moderate situation falls in between. The hypothesis is that moderate situations will be the best for separating out people who are more adaptive from those who are not as adaptive.

This information will be used by researchers and hiring agents to create pre-employment assessments that can select adaptable employees.

If answering any of these questions led you to feel distressed and you would like to speak to someone about your thoughts, please take advantage of the resources listed below.

#### **MSU Human Research Protection Program**

Judy McMillan (517) 432-4502 irb@msu.edu

#### **MSU Counseling Center**

(517) 355-8270 556 East Circle Drive, Room 207 East Lansing, MI 48824 counseling@cc.msu.edu

We would like to thank you again for your participation. Participants who are interested in learning more about the results of this study or about graduate school preparation may send the researchers a request via email at **sbhatia@msu.edu**. They may also send any comments, questions or concerns regarding the study to the principal investigator:

#### Dr. Ann Marie Ryan

333 Psychology Building Michigan State University East Lansing, MI 48823 ryanan@msu.edu (517) 353-8855

#### **Appendix B: Instructions to SMEs for sorting adaptive performance behaviors**

In this exercise you will be sorting adaptive behaviors as either high adaptive or low adaptive. A description of each of these categories is provided below:

**Proactive adaptability**: characteristic of someone who has both the ability and the approach orientation to identify early signs of change, and the ability to adapt to change before external pressures force adaptation. Proactive adapters often effect change in their environments without external incentives to do so. They may try new things or adopt new approaches without being asked to formally do so. They adapt to change with an approach orientation and a positive mindset.

**<u>Reactive adaptability</u>**: characteristic of a passive recipient of change who is not adept at identifying inclement change, and who only alters his or her behavior when it is necessary. These people are likely less skilled than those high in proactive adaptability when it comes to producing innovative solutions and integrating diverse pieces of information. They may be less up-to-date about organizational initiatives and progress, less able to see trends that predict inclement change, and less able to think of solutions when change is needed. Reactive adapters may also be more hesitant and less positive in their approach to change.

**No adaptability**: characteristic of someone who is completely unable or unwilling to adapt to change even when it is mandated by an external authority. They are either unable to change their current way of operating, or have a strong fear of change that erases their motivation to change.

Please sort the following cards into one of the two categories. If there is a card that does not seem to fit in any category, please place it to the side.

At the end you will be asked if any of the cards were hard to sort, or if the wording on a card could be clearer to better fit the definition of the category in which you felt it belonged. Please keep any issues in mind during the task so that you can talk about them briefly afterwards. Thank you!

The following bulleted behaviors were placed on cards for the SMEs to sort into the two categories.

- Identifying early signs of change
  - Integrating information to see change coming
  - Staying abreast of company developments
- Being willing to adjust to signs of change without external pressure
- Exhibiting a positive attitude towards change
- Initiating change in the environment (without any external pressure)
- Exploring new approaches, tools, and technologies through own curiosity or initiative
- Identifying change only when it is obvious or is pointed out by someone else
- Adjusting to change to maintain performance on the job or for some other extrinsic motivation (being less willing to adapt to change)
- Exhibiting a hesitant or reluctant attitude towards change
- Being a passive observer of the environment
- Retaining current approaches, tools, and technologies until required to change

*Follow-up question from researcher to SME*: Were there any cards that you had a lot of trouble sorting into one of the two categories? Are there changes you would make to that card so it better fit the definition of the category you thought it should go into?

### Appendix C: Survey for pilot test for situational strength

What is your name? (If you don't mind, so that if you leave a comment, I can follow up with you if anything is unclear. But feel free to leave this blank!)

Thank you very much for participating in this task!

#### Purpose

In this exercise, you will be sorting responses of people in organizations by level of situational strength. Situational strength refers to the extent to which cues in the environment signal the desirability of certain behaviors. Stronger situations are those that present many cues about appropriate behaviors; they press people to behave in certain ways. Weaker situations are those that accept a range of behaviors. Moderate situations fall in between the two.

#### **Descriptions of situational strength**

A weak situation is one that:

- Allows flexibility in interpretation of events
- Does not provide specific incentives for any course of behavior
- May provide conflicting or incompatible cues about what is happening in the environment or what is expected
- Allows one to make his or her own decision and act freely

A football game would be an example of a weak situation. Almost any behavior is acceptable; a person may calmly sitting in the stands and watch the game, or a person may paint his or her face in school colors and belligerently yell at the other side's fans the whole game. Neither person would feel out of place or like his or her behavior was not acceptable.

A **moderate situation** will fall in between a weak and a strong situation. There may be some guidance for what behaviors are expected, but there is still flexibility in what is considered normal.

A gym would be an example of a moderate situation. There is a general guideline for behavior – it should center on exercise – but there is a fair amount of variability allowed outside of that. People on a basketball court may be noisy and energetic, whereas someone lifting weights may be more quiet and focused.

#### A strong situation is one that:

- Provides easily understandable cues so that a person knows what he or she should do
- Provides incentives for following the expected response pattern (or consequences for **not** following the expected behavior)

- Provides consistent information over time about what is happening in the environment or what is expected
- Prevents one from making his or her own decision, or limits freedom

A funeral would be an example of a strong situation. There are clear guidelines as to what behaviors are acceptable, and deviations from these guidelines (such as laughing, talking in a loud voice, or making inappropriate jokes) are not likely to occur.

### **Directions for this exercise**

There are nine sets of responses that need to be categorized into weak, moderate, or strong situations. For each question, please move the boxes to align with 1 for weak, 2 for moderate, or 3 for strong next to the response. At the bottom of each set of responses, please leave comments or edits if you have any. These may be about the manipulation not being strong enough, about specific words, about reading level, etc.

Again, thank you so much for your help with this!

#### Appendix D: Proactive Personality Scale (Bateman & Crant, 1993)

Answers indicated on a 5-point Likert scale (strongly agree to strongly disagree)

- 1. I am constantly on the lookout for new ways to improve my life
- 2. I feel driven to make a difference in my community, and maybe the world
- 3. I tend to let others take the initiative to start new projects (R)
- 4. Wherever I have been, I have been a powerful force for constructive change
- 5. I enjoy facing and overcoming obstacles to my ideas
- 6. Nothing is more exciting than seeing my ideas turn into reality
- 7. If I see something I don't like, I fix it
- 8. No matter what the odds, if I believe in something I will make it happen
- 9. I love being a champion for my ideas, even against others' opposition
- 10. I excel at identifying opportunities
- 11. I am always looking for better ways to do things
- 12. If I believe in an idea, no obstacle will prevent me from making it happen
- 13. I love to challenge the status quo
- 14. When I have a problem, I tackle it head-on
- 15. I am great at turning problems into opportunities
- 16. I can spot a good opportunity long before others can
- 17. If I see someone in trouble, I help out in any way I can

#### Appendix E: I-ADAPT-M (Ployhart & Bliese, 2006)

Answers indicated on a 5-point Likert scale (strongly agree to strongly disagree)

- 1. I am able to maintain focus during emergencies. (Crisis)
- 2. I enjoy learning about cultures other than my own. (Cultural)
- 3. I usually over-react to stressful news. (Work stress)
- 4. I believe it is important to be flexible in dealing with others. (Interpersonal)
- 5. I take responsibility for acquiring new skills. (Learning)
- 6. I work well with diverse others. (Cultural)
- 7. I tend to be able to read others and understand how they are feeling at any particular moment. (Interpersonal)
- 8. I am adept at using my body to complete relevant tasks. (Physical)
- 9. In an emergency situation, I can put aside emotional feelings to handle important tasks. (Crisis)
- 10. I see connections between seemingly unrelated information. (Creativity)
- 11. I enjoy learning new approaches for conducting work. (Learning)
- 12. I think clearly in times of urgency. (Crisis)
- 13. I utilize my muscular strength well. (Physical)
- 14. It is important to me that I respect others' culture. (Cultural)
- 15. I feel unequipped to deal with too much stress. (Work stress)
- 16. I am good at developing unique analyses for complex problems. (Creativity)
- 17. I am able to be objective during emergencies. (Crisis)
- 18. My insight helps me to work effectively with others. (Interpersonal)
- 19. I enjoy the variety and learning experiences that come from working with people of different backgrounds. (Cultural)
- 20. I can only work in an orderly environment. (Physical)
- 21. I am easily rattled when my schedule is too full. (Work stress)
- 22. I usually step up and take action during a crisis. (Crisis)
- 23. I need for things to be "black and white". (Uncertainty)
- 24. I am an innovative person. (Creativity)
- 25. I feel comfortable interacting with others who have different values and customs. (Cultural)
- 26. If my environment is not comfortable (e.g., cleanliness), I cannot perform well. (Physical)
- 27. I make excellent decisions in times of crisis. (Crisis)
- 28. I become frustrated when things are unpredictable. (Uncertainty)
- 29. I am able to make effective decisions without all relevant information. (Uncertainty)
- 30. I am an open-minded person in dealing with others. (Interpersonal)
- 31. I take action to improve work performance deficiencies. (Learning)
- 32. I am usually stressed when I have a large workload. (Work stress)

- 33. I am perceptive of others and use that knowledge in interactions. (Interpersonal)
- 34. I often learn new information and skills to stay at the forefront of my profession. (Learning)
- 35. I often cry or get angry when I am under a great deal of stress. (Work stress)
- 36. When resources are insufficient, I thrive on developing innovative solutions. (Creativity)
- 37. I am able to look at problems from a multitude of angles. (Creativity)
- 38. I quickly learn new methods to solve problems. (Learning)
- 39. I tend to perform best in stable situations and environments. (Uncertainty)
- 40. When something unexpected happens, I readily change gears in response. (Uncertainty)
- 41. I would quit my job if it required me to be physically stronger. (Physical)
- 42. I try to be flexible when dealing with others. (Interpersonal)
- 43. I can adapt to changing situations. (Uncertainty)
- 44. I train to keep my work skills and knowledge current. (Learning)
- 45. I physically push myself to complete important tasks. (Uncertainty)
- 46. I am continually learning new skills for my job. (Learning)
- 47. I perform well in uncertain situations. (Uncertainty)
- 48. I can work effectively even when I am tired. (Physical)
- 49. I take responsibility for staying current in my profession. (Learning)
- 50. I adapt my behavior to get along with others. (Interpersonal)
- 51. I cannot work well if it is too hot or cold. (Physical)
- 52. I easily respond to changing conditions. (Uncertainty)
- 53. I try to learn new skills for my job before they are needed. (Learning)
- 54. I can adjust my plans to changing conditions. (Uncertainty)
- 55. I keep working even when I am physically exhausted. (Physical)

#### Appendix F: Script read by researcher during sessions

#### (Researcher reads at the beginning of study after everyone is seated)

Hi everyone, thank you for coming to this session. As a reminder, you will be here for half an hour and will receive 1 credit for participating. In this session, you will read several documents that you may read if you were working at a company. You will then answer a few questions based on each set of documents. At the end of the study, you will answer several questions about yourself including academic and demographic information.

One important piece of information: in order to receive credit, you must be here for the full 30 minutes. This means if you choose to fill out the survey, you should take your time with it because you have to be in this room anyways. I will pass out the debriefing form at the END of the session, and after you read it you can go.

At this point, please turn your phones on silent and put them away. I'll wait a few moments for you to do that.

Ok! Raise your hand if you have any issues or questions and I will come to you. Thank you again for being here and go ahead and start the study.

#### (Five minutes before the session ends, researcher reads the following)

I am going to come around and pass out the debrief form. If you are still working, take as much time as you need. After you finish and read the form, you are free to leave. If you want to take the form with you, that is fine. If you do not need it, leave it here please.

#### (Researcher passes out debrief form)

REFERENCES

#### REFERENCES

- Adaptability [Def. 1]. (n.d.). In *Merriam Webster Online*. Retrieved November 20, 2013 from http://www.merriam-webster.com/dictionary/adaptability.
- Allworth, E., & Hesketh, B. (1999). Construct-oriented biodata: Capturing change-related and contextually relevant future performance. *International Journal of Selection and Assessment*, 7(2), 97-111.
- Baard, S. K., Rench, T. A., & Kozlowski, S. W. (2014). Performance adaptation: A theoretical integration and review. *Journal of Management*, *40*(1), 48-99.
- Barrick, M. R. & Mount, M.K. (2005). Yes, personality matters: Moving on to more important matters. *Human Performance*, *18*(4), 359-372.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, *14*(2), 103-118.
- Beaty Jr, J. C., Cleveland, J. N., & Murphy, K. R. (2001). The relation between personality and contextual performance in" strong" versus" weak" situations. *Human Performance*, *14*(2), 125-148.
- Bing, M. N., Davison, H. K., & Smothers, J. (2014). Item-level Frame-of-reference Effects in Personality Testing: An investigation of incremental validity in an organizational setting. *International Journal of Selection and Assessment*, 22(2), 165-178.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*(2), 99-109.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the "strength" of the HRM system. *Academy of Management Review*, 29(2), 203-221.
- Bowers, K. S. (1973). Situationism in psychology: An analysis and a critique. *Psychological Review*, 80(5), 307-336.
- Bowler, M. C., & Woehr, D. J. (2009). Assessment center construct-related validity: Stepping beyond the MTMM matrix. *Journal of Vocational Behavior*, 75(2), 173-182.
- Burch, G. S. J., Pavelis, C., & Port, R. L. (2008). Selecting for creativity and innovation: The relationship between the innovation potential indicator and the team selection inventory. *International Journal of Selection and Assessment*, 16(2), 177-181.
- Burke, C. S., Stagl, K. C., Salas, E., Pierce, L., & Kendall, D. (2006). Understanding team adaptation: A conceptual analysis and model. *Journal of Applied Psychology*, 91(6), 1189-1207.
- Campbell, D. J. (2000). The proactive employee: Managing workplace initiative. *Academy of Management Executive*, *14*(3), 52–66.
- Carlson, K. D., & Wu, J. (2012). The Illusion of Statistical Control Control Variable Practice in Management Research. *Organizational Research Methods*, *15*(3), 413-435.
- Cassady, J. C. (2001). Self-reported GPA and SAT: A methodological note. *Practical Assessment, Research & Evaluation*, 7(12), 1-6.
- Chen, G., Thomas, B., & Wallace, J. C. (2005). A multilevel examination of the relationships among training outcomes, mediating regulatory processes, and adaptive performance. *Journal of Applied Psychology*, *90*(5), 827-841.
- Child, I. L. (1968). Personality in culture. In E. F. Borgatta & W.W Lambert (Eds.), *Handbook of personality theory and research* (p. 83). Chicago, IL: Rand McNally.
- Cooper, W. H., & Withey, M. J. (2009). The strong situation hypothesis. *Personality and Social Psychology Review*, *13*(1), 62-72.
- Coyle, T. R. (2006). Test–retest changes on scholastic aptitude tests are not related to *g*. *Intelligence*, *34*(1), 15-27.
- Crant, J. M. (1995). The Proactive Personality Scale and objective job performance among real estate agents. *Journal of Applied Psychology*, 80(4), 532-537.
- Crant, J. M. (1996). The Proactive Personality Scale as a predictor of entrepreneurial intentions. *Management*, 29(3), 62-74.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.
- Crant, J. M., & Bateman, T. S. (2000). Charismatic leadership viewed from above: The impact of proactive personality. *Journal of Organizational Behavior*, 21(1), 63-75.

- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*(1), 16.
- Davis-Blake, A., & Pfeffer, J. (1989). Just a mirage: The search for dispositional effects in organizational research. *Academy of Management Review*, 14(3), 385-400.
- Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive Therapy and Research*, 34(3), 241-253.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, *17*(2), 245-260.
- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, 24(6), 689-708.
- Endler, N. S. (1993). Personality: An interactional perspective. In J. Hettema & I. J. Deary (Eds.), *Foundations of personality* (pp. 251-268). Dordrecht, the Netherlands: Kluwer.
- Endler, N. S., & Parker, J. D. (1992). Interactionism revisited: Reflections on the continuing crisis in the personality area. *European Journal of Personality*, 6(3), 177-198.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality* and Social Psychology Review, 2(4), 290-309.
- Fisher, S. (1997). *The consistency of goal orientation: Effects of goal discrepancies and interest.* Unpublished doctoral dissertation, Michigan State University, East Lansing.
- Fleeson, W. (2004). Moving personality beyond the person-situation debate the challenge and the opportunity of within-person variability. *Current Directions in Psychological Science*, *13*(2), 83-87.
- Forehand, G. A., & von Haller Gilmer, B. (1964). Environmental variation in studies of organizational behavior. *Psychological Bulletin*, 62(6), 361-382.
- Frederiksen, N. (1972). Toward a taxonomy of situations. *American Psychologist*, 27(2), 114-123.
- Frey, M. C., & Detterman, D. K. (2004). Scholastic assessment or g? The relationship between the scholastic assessment test and general cognitive ability. *Psychological Science*, 15(6), 373-378.

- Fugate, M., & Kinicki, A. J. (2008). A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology*, 81(3), 503-527.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational behavior*, 65(1), 14-38.
- Fuller Jr, B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75(3), 329-345.
- Furr, R. M., & Funder, D. C. (2004). Situational similarity and behavioral consistency: Subjective, objective, variable-centered, and person-centered approaches. *Journal of Research in Personality*, 38(5), 421-447.
- Georgsdottir, A. S., & Getz, I. (2004). How flexibility facilitates innovation and ways to manage it in organizations. *Creativity and Innovation Management*, *13*(3), 166-175.
- Golubovich, J. (2013). The impact of situational strength on the validity of situational judgment items. *ProQuest Dissertations and Theses*, 275. Retrieved from http://ezproxy.msu.edu/login?url=http://search.proquest.com/docview/1468679308?accou ntid=12598.
- Griffin, B., & Hesketh, B. (2003). Adaptable behaviours for successful work and career adjustment. *Australian Journal of Psychology*, *55*(2), 65-73.
- Griffin, B., & Hesketh, B. (2004). Why openness to experience is not a good predictor of job performance. *International Journal of Selection and Assessment*, *12*(3), 243-251.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327-347.
- Griffin, M. A., Parker, S. K., & Mason, C. M. (2010). Leader vision and the development of adaptive and proactive performance: A longitudinal study. *Journal of Applied Psychology*, 95(1), 174-182.
- Harvey, J. H., Town, J. P., & Yarkin, K. L. (1981). How fundamental is" the fundamental attribution error"?. *Journal of Personality and Social Psychology*, 40(2), 346-349.

- Highhouse, S. (2009). Designing experiments that generalize. *Organizational Research Methods*, *12*(3), 554-566.
- Hoffman, B. J., Melchers, K. G., Blair, C. A., Kleinmann, M., & Ladd, R. T. (2011). Exercises and dimensions are the currency of assessment centers. *Personnel Psychology*, 64(2), 351-395.
- Holtrop, D., Born, M. P., & de Vries, R. E. (2014). Predicting Performance with Contextualized Inventories, No Frame-of-reference Effect?. *International Journal of Selection and Assessment*, 22(2), 219-223.
- Holtrop, D., Born, M. P., de Vries, A., & de Vries, R. E. (2014). A matter of context: A comparison of two types of contextualized personality measures. *Personality and Individual Differences*, 68, 234-240.
- Hough, L. M., & Oswald, F. L. (2008). Personality testing and industrial–organizational psychology: Reflections, progress, and prospects. *Industrial and Organizational Psychology*, 1(3), 272-290.
- Hough, L. M., & Schneider, R. J. (1996). Personality traits, taxonomies, and applications in organizations. In K. R. Murphy (Ed.), *Individual differences and behavior in* organizations (pp. 31-38). San Francisco, CA: Jossey-Bass.
- Huang, J. L., Ryan, A. M., Zabel, K. L., & Palmer, A. (2014). Personality and adaptive performance at work: A meta-analytic investigation. *Journal of Applied Psychology*, 99(1), 162.
- Jansen, A., Lievens, F., & Kleinmann, M. (2011). Do individual differences in perceiving situational demands moderate the relationship between personality and assessment center dimension ratings?. *Human Performance*, 24(3), 231-250.
- Jansen, A., Melchers, K. G., Lievens, F., Kleinmann, M., Brändli, M., Fraefel, L., & König, C. J. (2013). Situation assessment as an ignored factor in the behavioral consistency paradigm underlying the validity of personnel selection procedures. *Journal of Applied Psychology*, 98(2), 326-341.
- Johnson, J. A. (1997). Units of analysis for the description and explanation of personality. In R. Hogan, J. A. Johnson, & S.R. Briggs (Eds.), *Handbook of personality psychology* (pp. 73–93). San Diego, CA: Academic Press.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1), 107-122.

- Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology*, 88(5), 779-794.
- Kleinmann, M. (1993). Are rating dimensions in assessment centers transparent for participants? Consequences for criterion and construct validity. *Journal of Applied Psychology*, 78(6), 988.
- Koenig, K. A., Frey, M. C., & Detterman, D. K. (2008). ACT and general cognitive ability. *Intelligence*, *36*(2), 153-160.
- Kozlowski, S. W. J., & Bell, B. S. (2008). Team learning, development, and adaptation. In V. I. Sessa & M. London (Eds.), *Group learning* (pp. 15-44). Mahwah, NJ: Lawrence Erlbaum.
- Kozlowski, S. W. J., Gully, S. M., Brown, K. G., Salas, E., Smith, E. M., & Nason, E. R. (2001). Effects of training goals and goal orientation traits on multidimensional training outcomes and performance adaptability. *Organizational Behavior and Human Decision Processes*, 85(1), 1-31.
- Krause, M. S. (1970). Use of social situations for research purposes. *American Psychologist*, 25(8), 748-753.
- Krumm, S., Lievens, F., Hüffmeier, J., Lipnevich, A. A., Bendels, H., & Hertel, G. (2015). How "situational" is judgment in situational judgment tests?. *Journal of Applied Psychology*, *100*(2), 399-416.
- Lang, J. W., & Bliese, P. D. (2009). General mental ability and two types of adaptation to unforeseen change: Applying discontinuous growth models to the task-change paradigm. *Journal of Applied Psychology*, 94(2), 411-428.
- LePine, J. A. (2003). Team adaptation and postchange performance: Effects of team composition in terms of members' cognitive ability and personality. *Journal of Applied Psychology*, 88(1), 27-39.
- LePine, J. A. (2005). Adaptation of teams in response to unforeseen change: Effects of goal difficulty and team composition in terms of cognitive ability and goal orientation. *Journal of Applied Psychology*, 90(6), 1153-1167.

- LePine, J. A., Colquitt, J. A., & Erez, A. (2000). Adaptability to changing task contexts: Effects of general cognitive ability, conscientiousness, and openness to experience. *Personnel Psychology*, 53(3), 563-593.
- LePine, J. A., Hollenbeck, J. R., Ilgen, D. R., Colquitt, J. A., & Ellis, A. (2002). Gender composition, situational strength, and team decision-making accuracy: A criterion decomposition approach. *Organizational Behavior and Human Decision Processes*, 88(1), 445-475.
- Li, N., Liang, J., & Crant, J. M. (2010). The role of proactive personality in job satisfaction and organizational citizenship behavior: A relational perspective. *Journal of Applied Psychology*, 95(2), 395-404.
- Lievens, F., & Conway, J. M. (2001). Dimension and exercise variance in assessment center scores: a large-scale evaluation of multitrait-multimethod studies. *Journal of Applied Psychology*, 86(6), 1202.
- Lucas, R. E., & Donnellan, M. B. (2009). If the person–situation debate is really over, why does it still generate so much negative affect?. *Journal of Research in Personality*, *43*(2), 146-149.
- Magnusson, D. (1971). An analysis of situational dimensions. *Perceptual and Motor Skills*, 32(3), 851-867.
- Magnusson, D., & Endler, N. S. (1977). Personality at the crossroads: Current issues in interactional psychology. Hillsdale, NJ: Erlbaum.
- McDaniels, M. A., Hartman, N. S., Whetzel, D. L., & Grubb, W. (2007). Situational judgment tests, response instructions, and validity: A meta-analysis. *Personnel Psychology*, 60(1), 63-91.
- Meneely, J., & Portillo, M. (2005). The adaptable mind in design: Relating personality, cognitive style, and creative performance. *Creativity Research Journal*, *17*(2-3), 155-166.
- Meyer, R. D., & Dalal, R. S. (2009). Situational strength as a means of conceptualizing context. *Industrial and Organizational Psychology*, 2(1), 99-102.
- Meyer, R. D., Dalal, R. S., & Bonaccio, S. (2009). A meta-analytic investigation into the moderating effects of situational strength on the conscientiousness–performance relationship. *Journal of Organizational Behavior*, 30(8), 1077-1102.

- Meyer, R. D., Dalal, R. S., & Hermida, R. (2010). A review and synthesis of situational strength in the organizational sciences. *Journal of Management*, *36*(1), 121-140.
- Meyer, R. D., Dalal, R. S., José, I. J., Hermida, R., Chen, T. R., Vega, R. P., ... & Khare, V. P. (2011). Measuring job-related situational strength and assessing its interactive effects with personality on voluntary work behavior. *Journal of Management*, 40(4), 1010-1041.
- Mentkowski, M. (Ed.). (2000). *Learning that lasts: Integrating learning, development, and performance in college and beyond*. San Francisco: Jossey-Bass.
- Milgram, S. (1963). Behavioral study of obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 371-378.
- Milgram, S. (1965). Some conditions of obedience and disobedience to authority. *Human Relations*, *18*(1), 57-76.
- Mischel, W. (1968). Personality and assessment. New York: Wiley.
- Mischel, W. (1977). On the future of personality measurement. *American Psychologist*, 32(4), 246-254.
- Mischel, W. (1999). Implications of person–situation interaction: Getting over the field's borderline personality disorder. *European Journal of Personality*, *13*(5), 455-461.
- Mischel, W. (2004). Toward an integrative science of the person. *Annual Review of Psychology*, 55, 1-22.
- Mischel W. & Peake P.K. (1983). Facets of consistency: Replies to Epstein, Funder, & Bem. *Psychological Review*, *90*(4), 394–402.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246–268.
- Monson, T. C., Hesley, J. W., & Chernick, L. (1982). Specifying when personality traits can and cannot predict behavior: An alternative to abandoning the attempt to predict single-act criteria. *Journal of Personality and Social Psychology*, 43(2), 385-399.
- Moos, R. H. (1973). Conceptualizations of human environments. *American Psychologist*, 28(8), 652-665.

- Motowidlo, S. J., Dunnette, M. D., & Carter, G. W. (1990). An alternative selection procedure: The low-fidelity simulation. *Journal of Applied Psychology*, 75(6), 640.
- Mumford, M. D., Baughman, W. A., Threlfall, K. V., Uhlman, C. E., & Costanza, D. P. (1993). Personality, adaptability, and performance: Performance on well-defined problem solving tasks. *Human Performance*, 6(3), 241-285.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, *58*(2), 367–408.
- Pervin, L. A. (1976). A free-response description approach to the analysis of person-situation interaction. *Journal of Personality and Social Psychology*, *34*(3), 465-474.
- O'Brien, R. G., & Kaiser, M. K. (1985). MANOVA method for analyzing repeated measures designs: An extensive primer. *Psychological Bulletin*, 97(2), 316.
- Oswald, F. L., Schmitt, N., Kim, B. H., Ramsay, L. J., & Gillespie, M. A. (2004). Developing a biodata measure and situational judgment inventory as predictors of college student performance. *Journal of Applied Psychology*, *89*(2), 187.
- Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, *83*(6), 835–852.
- Pervin, L. A. (1978). Definitions, measurements, and classifications of stimuli, situations, and environments. *Human Ecology*, *6*(1), 71-105.
- Pesta, B. J., & Poznanski, P. J. (2008). Black–white differences on IQ and grades: The mediating role of elementary cognitive tasks. *Intelligence*, *36*(4), 323-329.
- Ployhart, R. E., & Bliese, P. D. (2006). Individual ADAPTability (IADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. In S. Burke, L. Pierce, & E. Salas (Eds.), *Understanding adaptability: A prerequisite for effective performance within complex environments* (pp. 3–39). Oxford, United Kingdom: Elsevier.
- Ployhart, R. E., & Ehrhart, M. G. (2003). Be careful what you ask for: Effects of response instructions on the construct validity and reliability of situational judgment tests. *International Journal of Selection and Assessment*, 11(1), 1-16.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, *12*(4), 531-544.

- Price, R. H., & Bouffard, D. L. (1974). Behavioral appropriateness and situational constraint as dimensions of social behavior. *Journal of Personality and Social Psychology*, 30(4), 579-586.
- Pryor, J. B., LaVite, C. M., & Stoller, L. M. (1993). A social psychological analysis of sexual harassment: The person/situation interaction. *Journal of Vocational Behavior*, 42(1), 68-83.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4), 612-624.
- Pulakos, E. D., Schmitt, N., Dorsey, D. W., Arad, S., Borman, W. C., & Hedge, J. W. (2002). Predicting adaptive performance: Further tests of a model of adaptability. *Human Performance*, 15(4), 299-323.
- Reder, L. M., & Schunn, C. D. (1999). Bringing together the psychometric and strategy worlds: Predicting adaptivity in a dynamic task. *Cognitive regulation of performance: Interaction* of theory and application. Attention and Performance XVII, 315-342.
- Roberts, B. W. (2009). Back to the future: *Personality and Assessment* and personality development. *Journal of Research in Personality*, 43(2), 137-145.
- Rockstuhl, T., Ang, S., Ng, K.Y., Lievens, F., & Van Dyne, L. (2015) Putting judging situations into situational judgment tests: Evidence from intercultural multimedia SJTs. *Journal of Applied Psychology*, 100(2), 464-480.
- Rosen, M. A., Bedwell, W. L., Wildman, J. L., Fritzsche, B. A., Salas, E., & Burke, C. S. (2011). Managing adaptive performance in teams: Guiding principles and behavioral markers for measurement. *Human Resource Management Review*, 21(2), 107-122.
- Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. New York, NY: McGraw-Hill Book Company.
- Rubin, N. J., Bebeau, M., Leigh, I. W., Lichtenberg, J. W., Nelson, P. D., Portnoy, S., ... & Kaslow, N. J. (2007). The competency movement within psychology: A historical perspective. *Professional Psychology: Research and Practice*, 38(5), 452-462.
- Savickas, M. L. (2005). The theory and practice of career construction. In R. W. Lent, & S. D. Brown (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Hoboken, NJ: John Wiley & Sons.

- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661-673.
- Schmitt, M., Gollwitzer, M., Baumert, A., Gschwendner, T., Hofmann, W., & Rothmund, T. (2008). Traits as situational sensitivities: Psychometric and substantive comments on the TASS model proposed by Marshall and Brown (2006) [Review of Marshall & Brown, 2006]. Retrieved from http://psydok.sulb.uni-saarland.de/volltexte/2009/2352/.
- Schneider, R. J., & Hough, L. M. (1995). Personality and industrial/organizational psychology. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and* organizational psychology (pp. 75-129). Chichester, UK: Wiley.
- Schneider, B., Salvaggio, A. N., & Subirats, M. (2002). Climate strength: a new direction for climate research. *Journal of Applied Psychology*, 87(2), 220.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416-427.
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54(4), 845-874.
- Sells, S. B. (Ed.). (1963). Stimulus determinants of behavior. New York: Ronald Press.
- Shaffer, J. A., & Postlethwaite, B. E. (2012). A matter of context: A meta-analytic investigation of the relative validity of contextualized and noncontextualized personality measures. *Personnel Psychology*, *65*(3), 445-494.
- Sherman, R. A., Nave, C. S., & Funder, D. C. (2010). Situational similarity and personality predict behavioral consistency. *Journal of Personality and Social Psychology*, 99(2), 330-343.
- Shoss, M. K., Witt, L. A., & Vera, D. (2012). When does adaptive performance lead to higher task performance?. *Journal of Organizational Behavior*, *33*(7), 910-924.
- Situation [Def. 1]. (n.d.). In *Merriam Webster Online*. Retrieved January 24, 2014 from http://www.merriam-webster.com/dictionary/situation.

- Smith, E. M., Ford, J. K., & Kozlowski, S.W. J. (1997). Building adaptive expertise: Implications for training design. In M. A. Quinones & A. Dudda (Eds.), *Training for 21<sup>st</sup> century technology: Applications of psychological research* (pp. 89-118). Washington, DC: APA Books.
- Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology*, *3rd ed* (pp. 883-948). New York: Random House.
- Song, L. J., Huang, G. H., Peng, K. Z., Law, K. S., Wong, C. S., & Chen, Z. (2010). The differential effects of general mental ability and emotional intelligence on academic performance and social interactions. *Intelligence*, 38(1), 137-143.
- Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavior*, *15*(5), 385-392.
- Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, *14*(2), 287-305.
- Spector, P. E., Schneider, J. R., Vance, C. A., & Hezlett, S. A. (2000). The relation of cognitive ability and personality traits to assessment center performance. *Journal of Applied Social Psychology*, *30*(7), 1474-1491.
- Stainton Rogers, W. (2011). *Social psychology*. Berkshire, England: McGraw Hill Open University Press.
- Statistical Package for the Social Sciences (SPSS). (2005). Linear mixed-effects modeling in SPSS: An introduction to the MIXED procedure. Retrieved from http://www.spss.ch/upload/1126184451\_Linear%20Mixed%20Effects%20Modeling%20i n%20SPSS.pdf
- Steel, P. (2007). The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, *133*(1), 65.
- Ten Berge, M. A., & De Raad, B. (1999). Taxonomies of situations from a trait psychological perspective: A review. *European Journal of Personality*, *13*(5), 337-360.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500.

- Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and crosssituational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, 34(4), 397-423.
- Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *Academy of Management Review*, *11*(3), 601-617.
- Trimpop, R., & Kirkcaldy, B. (1997). Personality predictors of driving accidents. *Personality* and *Individual Differences*, 23(1), 147-152.
- Tucker, J. S., Pleban, R. J., & Gunther, K. M. (2010). The mediating effects of adaptive skill on values-performance relationships. *Human Performance*, 23(1), 81-99.
- Van Heck, G. L. (1984). The construction of a general taxonomy of situations. In H. Bonarius, G. L. Van Heck, & N. Smid (Eds.), *Personality psychology in Europe: Theoretical and empirical developments* (pp. 149–164). Lisse, The Netherlands: Swets and Zeitlinger.
- Van Heck, G. L. (1989). Situation concepts: Definitions and classification. In P. J Hettema (Ed.), *Personality and environment: Assessment of human adaptation* (pp. 53-69). Chichester, UK: Wiley.
- Weiss, H. M., & Adler, S. (1984). Personality and organizational behavior. *Research in Organizational Behavior*, 6: 1-50.
- Wright, T. A., & Bonett, D. G. (2002). The moderating effects of employee tenure on the relation between organizational commitment and job performance: A meta-analysis. *Journal of Applied Psychology*, 87(6), 1183.