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Understanding the Dark and Bright Sides of Anxiety: A Theory of Workplace Anxiety

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Researchers have uncovered inconsistent relations between anxiety and performance. Although the prominent view is a “dark side,” where anxiety has a negative relation with performance, a “bright side” of anxiety has also been suggested. We reconcile past findings by presenting a comprehensive multilevel, multiprocess model of workplace anxiety called the *theory of workplace anxiety* (TWA). This model highlights the processes and conditions through which workplace anxiety may lead to debilitating and facilitative job performance and includes 19 theoretical propositions. Drawing on past theories of anxiety, resource depletion, cognitive-motivational processing, and performance, we uncover the debilitating and facilitative nature of dispositional and situational workplace anxiety by positioning emotional exhaustion, self-regulatory processing, and cognitive interference as distinct contrasting processes underlying the relationship between workplace anxiety and job performance. Extending our theoretical model, we pinpoint motivation, ability, and emotional intelligence as critical conditions that shape when workplace anxiety will debilitate and facilitate job performance. We also identify the unique employee, job, and situational characteristics that serve as antecedents of dispositional and situational workplace anxiety. The TWA offers a nuanced perspective on workplace anxiety and serves as a foundation for future work.

Keywords: workplace anxiety, self-regulation, cognitive processing, emotional exhaustion, job performance

Decades ago, American poet W. H. Auden (1947) won a Pulitzer prize for his eclogue that focused on “The age of anxiety” (p. 1). This poem has never resonated more strongly than it does today, particularly as applied to workplace anxiety. *Workplace anxiety*, a response to stressors in the form of a strain symptom (Jex, 1998), is defined as feelings of nervousness, uneasiness, and tension about job-related performance (McCarthy, Trougakos, & Cheng, 2016). It is influenced by both individual differences and environmental factors (Motowidlo, Packard, & Manning, 1986) and is operationalized at both dispositional and situational levels. Research has indicated that 40% of Americans report feeling anxious during the work day (American Psychological Association, 2009), and 72% of Americans experiencing daily anxiety report that it interferes with their work and personal lives (Anxiety and Depression Association of America, 2006).

These statistics raise serious concerns, as general levels of workplace anxiety have substantial implications for employees and organizations in terms of unethical workplace behaviors (Kouchaki & Desai, 2015), lower levels of job performance (McCarthy et al., 2016), and risk-taking behaviors (Mannor, Wowak, Bartkus, & Gomez-Mejia, 2016). Daily fluctuations in anxiety are also a concern, as they can lead to higher levels of counterproductive behaviors and organizational turnover (Rodell & Judge, 2009). To compound matters, work-related stress and anxiety have been found to lead to psychological disorders in employees with no previous history of these conditions (Melchior et al., 2007).

Within the broad literature on anxiety, a “dark side” has been widely theorized. In general, anxious individuals possess hypervigilant cognitive schemas that define situations as threatening (Beck, 1976; Ellis, 1962). As a result, they are constantly scanning the environment for signs of threat, making them prone to heightened distractibility (Bar-Haim, Lamy, Pergamin, Bakermans-Kranenburg, & van Ijzendoorn, 2007). Anxious individuals correspondingly exhibit a range of information processing biases: They are more likely to attend to threat-related stimuli, construe threat from ambiguous stimuli, and recall threat-related information (e.g., Eysenck, 1992). Anxious individuals also have self-doubts regarding their ability to manage threatening situations and lack confidence in their abilities (Shell & Husman, 2008). Consistent with the preceding text, empirical studies have uncovered a negative relationship between anxiety and performance on a range of criteria, such as selection tests (Proost, Derous, Schreurs, Hagtvet, & De Witte, 2008), job interviews (McCarthy & Goffin, 2004), and academic tests (Hembree, 1988). It has even been said that “an-

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xiety must be driven out of the workplace to foster optimum performance and quality” (Reio & Callahan, 2004, p. 18).

Although the dominant view in the literature suggests a dark side of anxiety, we believe that this is overly simplistic and incomplete. We argue that anxiety is not always detrimental to performance and can have facilitative effects, or a bright side. For example, anxiety can serve a motivating function: Anxious individuals are more sensitive to feedback and thus more vigilant in monitoring their surroundings and themselves (Elliot & McGregor, 1999; Eysenck & Derakshan, 2011). Such hypervigilance signals that more resources, such as effort, need to be allocated to the task. A bright side of anxiety is also evident in research that has examined emotions from an evolutionary point of view, which suggests that anxiety leads to strategic actions to avoid harm (e.g., Izard & Youngstrom, 1996; Mathews, 1990). Corresponding empirical evidence, though limited, has found a positive relationship between anxiety and performance (e.g., Mughal, Walsh, & Wilding, 1996).

Thus, previous research findings present an interesting puzzle. On the one hand, anxiety can have detrimental effects on performance. As such, it can conjure distressing thoughts, suggesting that it is something to be avoided. On the other hand, anxiety can have facilitative effects on performance. As such, it can drive actions, suggesting that it is beneficial. We seek to reconcile these seemingly oppositional sets of findings by advancing a comprehensive theoretical model that includes both dark and bright sides of anxiety, a theory of workplace anxiety (TWA). The goal of the TWA is to model the complex nature of workplace anxiety, thus identifying the underlying processes and boundary conditions that determine how and when both dispositional and situational workplace anxiety can exert negative *and* positive effects on job performance. This is accomplished by building on, integrating, and advancing existing research on anxiety and stress. Drawing on past anxiety theories (e.g., Eysenck, Derakshan, Santos, & Calvo,

2007), cognitive processing theories (e.g., Wine, 1980), personal resource theories (e.g., Hobfoll, 1989), cognitive-motivational theories (e.g., Kanfer & Ackerman, 1989), and performance theories (e.g., Motowidlo, Borman, & Schmit, 1997; Sackett, Zedeck, & Fogli, 1988), we develop a model that challenges previous notions of anxiety as a universally detrimental force. In doing so, our model advances knowledge about the experience of workplace anxiety and has important implications for employees and organizations.

The main tenets of the TWA are shown in Figure 1. The TWA is divided into two levels: one representing relations between dispositional workplace anxiety and typical job performance (between-person level; see upper portion) and the other representing relations between situational workplace anxiety and episodic job performance (within-person level; see lower portion). The first part of our theoretical model unravels how dispositional and situational workplace anxiety can have complementary positive and negative effects on job performance. Drawing from resource based theories (Hobfoll, 1989), we propose that dispositional workplace anxiety debilitates typical job performance by triggering emotional exhaustion. Drawing from cognitive processing theories, we propose that situational workplace anxiety debilitates episodic performance through cognitive interference. We further propose that dispositional workplace anxiety facilitates typical job performance through reflective self-regulatory processing, and that situational workplace anxiety facilitates episodic job performance through reflexive self-regulatory processing (Carver, Johnson, & Joormann, 2008). The second part of our theoretical model considers when dispositional and situational workplace anxiety lead to higher or lower levels of performance. Motivation, ability, and emotional intelligence (EI) are positioned as boundary conditions that guide when dispositional and situational workplace anxiety will facilitate and debilitate typical and episodic job performance. We also pinpoint key employee characteristics, situa-

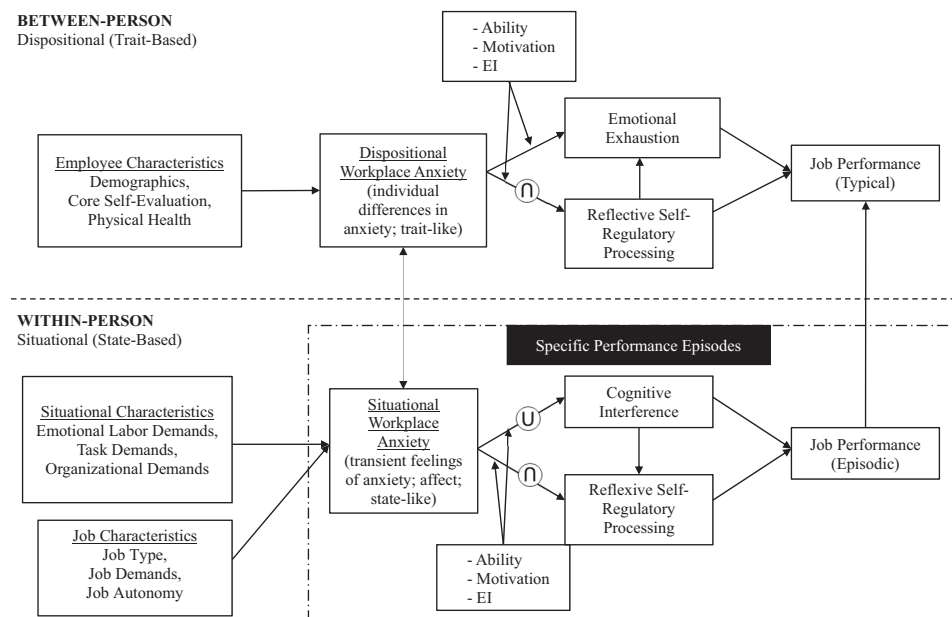


Figure 1. Theory of Workplace Anxiety (TWA).

tional characteristics, and job characteristics that serve as determinants of workplace anxiety. We present a comprehensive description of our entire model and underlying propositions in the section titled “Theory of Workplace Anxiety.”

Our model makes several important theoretical contributions. First, the TWA serves to disentangle equivocal findings in the literature by distinguishing between dispositional (i.e., trait-like) and situational (i.e., state-based) workplace anxiety. Dispositional workplace anxiety reflects individual differences in the extent to which employees experience general levels of anxiety at work. In contrast, situational workplace anxiety reflects transient feelings of anxiety in specific workplace situations. Few theories incorporate situational and trait effects on performance in work contexts. As a result, there is no clear distinction between affective experiences and personality in general (Weiss & Kurek, 2003), and certainly not between trait and state workplace anxiety. In fact, past research has suffered from a “failure to distinguish between anxiety as an emotional state and individual differences in anxiety as a personality trait” (Bushman, Vagg, & Spielberger, 2005, p. 77). Instead, past research often treats the two as completely distinct variables that emerge from personality (trait-based anxiety) or emotion-based (state-based) research. Thus, there have been multiple calls for models that focus on the integration of personality and affect/emotions (Barrick, Mitchell, & Stewart, 2004; Weiss & Kurek, 2003). The TWA integrates dispositional and situational workplace anxiety, allowing for within-person variability at the situation-specific level as well as between-person variability across individuals. This multilevel model makes it highly relevant for a number of research areas, including the relatively distinct fields of personality and emotions.

A second important extension of past research is that we consider a bright side of anxiety by focusing on the precise mechanisms underlying the relationship between dispositional and situational workplace anxiety and typical and episodic job performance. Despite decades of research, we are limited in our knowledge of the potential for a bright side linking workplace anxiety and job performance. By outlining how dispositional and situational workplace anxiety affect typical and episodic job performance, we extend past work that has focused only on the main effects of anxiety and performance (e.g., Seipp, 1991) or on the debilitating pathway between anxiety and performance (e.g., Eysenck, 1992). Our model outlines the multiple processes that depict how both types of workplace anxiety lead to debilitating as well as facilitative pathways. Moreover, we outline when dispositional and situational workplace anxiety will lead to each path. Ultimately, we explicate not only the detrimental, but also the facilitative processes that specify how and when dispositional and situational workplace anxiety can influence typical and episodic job performance.

Third, a limitation of past work has been the treatment of performance as a unidimensional construct, with little effort to match anxiety to specific performance types. We align our distinction between dispositional and situational workplace anxiety with two types of performance: That which occurs in more routine contexts, where employees are carrying out multiple tasks over an extended period (typical performance; Cronbach, 1960; Sackett et al., 1988), and that which represents discrete behavioral episodes or performance situations of a relatively short duration (episodic performance; Beal, Weiss, Barros, & MacDermid, 2005; Motowidlo et al., 1997). In matching anxiety with performance type, we

provide a more accurate representation of the precise nature through which dispositional and situational workplace anxiety affect typical and episodic performance. We also answer calls to simultaneously consider dispositional and situational effects on performance outcomes in work contexts (Barrick et al., 2004).

Finally, we draw broadly from various domains of psychology to establish unique employee characteristics (e.g., employee gender) that impact dispositional workplace anxiety. We also identify the main environmental characteristics (e.g., emotional labor demands) and job characteristics (e.g., job type) as the primary nomological network of constructs that impact situational workplace anxiety.

In summary, we advance a comprehensive model of workplace anxiety that elucidates distinct determinants, processes, and boundary conditions; highlights both dark and bright sides; and considers dispositional and situational levels of workplace anxiety in relation to typical and episodic job performance. As such, the TWA provides a comprehensive framework for understanding the complexity and depth of workplace anxiety that has been missing from the field of organizational behavior. Our model also offers real-world applications for personnel selection practices, promotion contexts, employee training, goal-setting initiatives, work-life balance programs, and leadership development strategies.

The Construct of Workplace Anxiety

Dispositional and Situational Workplace Anxiety

The construct of anxiety was central to Freudian theories, as Freud (1924) believed that all humans were driven by the need to reduce tension or nervousness. Not until Spielberger’s (1985) work, many years later, did anxiety begin to receive widespread empirical examination. Spielberger defined anxiety as the tendency to experience tension and worry with regard to the appraisal of threatening situations, highlighted the multifaceted nature of anxiety, and distinguished between general levels of trait anxiety and state anxiety. In alignment with our definition of workplace anxiety, we conceptualize *dispositional workplace anxiety* as individual differences in feelings of nervousness, uneasiness, and tension about job performance and *situational workplace anxiety* as a transient emotional state reflecting nervousness, uneasiness, and tension about specific job performance episodes. Dispositional workplace anxiety is theoretically distinct from general trait anxiety. While general trait anxiety refers to an individual’s general experience of anxiety, dispositional workplace anxiety is a situation-specific trait that relates to an individual’s job. As a situation-specific trait, dispositional workplace anxiety is aligned with other situation-specific anxieties, such as test anxiety (Spielberger, Anton, & Bedell, 1976) and competitive sports anxiety (Martens et al., 1990). Empirical evidence substantiates this distinction, with findings revealing low to moderate relationships between situation-specific anxieties (e.g., test anxiety, sport anxiety) and general trait anxiety (Cerin, 2004; Mandler & Sarason, 1952; Raufelder et al., 2016).

Spielberger’s trait-state and test anxiety theories (Spielberger, 1985; Spielberger & Vagg, 1995) have served as the most prominent frameworks of anxiety. Each has influenced anxiety research primarily within academic contexts and for intellectual-cognitive tasks (Spielberger & Vagg, 1995). However, these models focus on the measurement of anxiety and fail to clarify how and when anxiety can

debilitate and facilitate performance. Further, theories of anxiety that have emerged since Spielberger's work have focused exclusively on trait (e.g., Costa & McRae, 1992) or state anxiety (e.g., Eysenck et al., 2007). Thus, a comprehensive theoretical model of anxiety and performance is needed, in particular, a model that details how and when dispositional and situation-specific workplace anxiety can help and hurt job performance.

Research that addresses how dispositional and situational workplace anxiety affect job performance would have notable implications for both employees and organizations. From a dispositional perspective, employees who experience anxiety across situations are more likely to view situations as threatening, and this may prove detrimental over time. As such, dispositional workplace anxiety is more likely to play a pivotal role with respect to long-term outcomes, such as health and well-being, job performance, and organizational productivity. Thus, the direction and mechanisms underlying the relationship between dispositional workplace anxiety and job performance would have significant implications for training employees on how to cope with anxiety. The extent to which situational workplace anxiety affects job performance carries somewhat different implications, as it is characterized by fluctuating levels of anxiety in employees' daily work lives. There are likely several episodes within a given work day, week, or month where situation-based workplace anxiety will peak, such as when meeting an important deadline or receiving an unexpected meeting request from a supervisor. These episodes can affect task performance significantly. Capturing both dispositional and situational levels of workplace anxiety is needed for a complete consideration of workplace anxiety.

Distinguishing Workplace Anxiety From Neuroticism, Negative Affect, and Stress

It is important to distinguish workplace anxiety from related constructs, such as neuroticism, negative affect, and stress. Workplace anxiety can be distinguished from *neuroticism*, which reflects a disposition toward experiencing a wider net of negative emotions, such as fear and guilt, and a propensity to exhibit poor emotional stability (Goldberg, 1990). Workplace anxiety is also distinct from *negative affect*. As an affective disposition, individuals with negative affect tend to experience a wide array of aversive emotional states and have a negative view of the self (Watson & Clark, 1984). Finally, workplace anxiety is distinct from *stress*. The prevalent view is that stress is a process by which environmental and external stressors lead to subjective interpretations that generate subsequent strain reactions (Bliese, Edwards, & Sonnentag, 2017; Sonnentag & Fritz, 2015). Within this framework, anxiety is conceptualized as a response to a stressor in the form of a strain symptom (Jex, 1998).

Current Understanding of the Relationship Between Anxiety and Job Performance

Theories of Anxiety and Performance

There is a rich pool of theories in the realm of anxiety that have been largely influential in the development of our current theory of workplace anxiety. Most have focused on test anxiety (e.g., Hodapp & Henneberger, 1983; Mandler & Sarason, 1952; Meichen-

baum & Butler, 1980; Sarason, 1980; Smith, Arnkoff, & Wright, 1990) and competitive sports anxiety (e.g., Hanin, 1978, 1986; Hardy & Parfitt, 1991; Martens, Burton, Vealey, Bump, & Smith, 1990; Masters, 1992). These theories have advanced our understanding of anxiety in a number of ways. First, they have charted the complex relationship between anxiety and performance in different contexts (e.g., Hanin, 1978, 1986; Mandler & Sarason, 1952). In sports psychology, for example, researchers have developed models of precompetition anxiety to track how anxiety can peak and dissipate over the course of a sporting event (Martens et al., 1990). In the test anxiety domain, off-task attention has been found to explain the underlying relationships between test anxiety and test performance (see Mueller, 1992 for a review). These theories also highlight the role of automatic behavior and cognitive attention within the anxiety process. Masters (1992), for example, identified anxious performers' attempts to control automatic behaviors as a key explanation for impairments in sport performance.

More recently, general theories of anxiety and performance have emerged, including processing efficiency theory (Eysenck & Calvo, 1992) and attentional control theory (Eysenck et al., 2007). These theories expand the foundation for studying the role of attentional control mechanisms in the relationship between anxiety and performance. Central to these theories is how the working memory system is associated with anxiety and affects cognitive performance. These theories propose that anxiety acts to decrease processing efficiency with respect to the attentional control functions of shifting (i.e., shifting attention within or across tasks) and inhibition (i.e., inhibiting attention paid to task-irrelevant stimuli).

Although each of these theories is invaluable, none provide a comprehensive examination of anxiety as it relates to performance on the job. As a result, past theories do not account for the full range of mechanisms that influence how anxiety is related to performance at work. Further, existing theories fail to consider how and when anxiety might debilitate and facilitate job performance – they neglect to integrate both dispositional and situational components of anxiety, or identify antecedents of workplace anxiety, and they do not specify relations between anxiety and types of performance, such as typical and episodic performance on the job. Our theory fills these gaps by building on past work and providing a comprehensive model of workplace anxiety that outlines the underlying processes, boundary conditions, and antecedents, as well as explicates how and when workplace anxiety can have both a dark and a bright side in affecting job performance. We also move beyond past work by considering specific types of performance. Specifically, we align dispositional workplace anxiety with typical performance, as the chronic nature of dispositional anxiety is more likely to affect routinized performance, which occurs on a daily basis. We align situational workplace anxiety with episodic performance, as context-specific anxiety is more likely to impact shorter performance situations. Aligning these perspectives is advantageous, because it allows us to simultaneously examine dispositional and situational effects on performance outcomes in a work context (e.g., Barrick et al., 2004).

Research on Anxiety and Performance

Although the relationship between anxiety and performance has not been studied extensively in work contexts, the literature on anxiety and performance in the broader psychology literature is wide-reaching. The prevailing view is that the anxiety-performance relationship is nega-

tive. This is supported by meta-analyses that have examined the relationship between anxiety and academic performance (Seipp, 1991), anxiety and creative performance (Byron & Khazanchi, 2011), and anxiety and sport performance (Kleine, 1990).

Although a negative relationship between anxiety and performance represents the dominant perspective, some researchers in educational and sports psychology have noted that situation-specific anxiety may exert facilitative effects on performance. Educational psychology researchers, for example, have developed tests asking students to rate whether their feelings of anxiety facilitate or debilitate their performance on tests and examinations (Alpert & Haber, 1960). Similarly, theories developed in the realm of sports psychology have indicated the possibility for competitive sports anxiety to benefit competition performance (e.g., Hanin, 1978, 1986; Hardy & Parfitt, 1991). For example, models in the sports psychology domain ask athletes to appraise whether their precompetition anxiety is helpful to performance (Jones, 1995). Findings revealed that perceiving anxiety to be facilitative to performance is linked to higher performance (Jones, Swain, & Hardy, 1993).¹

Research examining a curvilinear relationship between anxiety and performance also lends some support for both a positive and negative effect on performance. Over the years, the facilitative side of anxiety was popularized by the Yerkes-Dodson law (Yerkes & Dodson, 1908), which suggested that arousal, up to a certain point, was expected to yield high levels of performance. A curvilinear (i.e., inverted-U) perspective of the anxiety-performance relationship suggests that performance is highest at moderate levels of anxiety, while performance is lowest at low and high levels of anxiety, though the validity of this relationship has been criticized (see Teigen, 1994 for a review).² Empirical findings with respect to a curvilinear relationship between general levels of anxiety and performance have been mixed. Some studies have found support for a curvilinear relationship (e.g., Byron, Khazanchi, & Nazarian, 2010; Chamberlain & Hale, 2007), whereas others have found no support for a curvilinear relationship (e.g., Smillie, Yeo, Furnham, & Jackson, 2006), or opposite findings (e.g., U-shaped relationship; Leung, Huang, Su, & Lu, 2011).

A thorough search of the literature revealed 22 studies that have examined anxiety and job performance in work contexts. These studies are reviewed in Table 1. As demonstrated in the table, 16 of these studies examined dispositional anxiety. The remaining studies examined specific types of situational anxiety, such as sales call anxiety (Verbeke & Bagozzi, 2000), anxiety from a well-being or physiological perspective (Regehr, LeBlanc, Jelley, & Barath, 2008; Steen, Firth, & Bond, 1998), or experimentally manipulated anxiety (Nieuwenhuys & Oudejans, 2010). Importantly, findings are inconsistent. Some studies reveal a significant negative relationship (e.g., Kouchaki & Desai, 2015), whereas others reveal a significant positive relationship (e.g., Mughal et al., 1996) or no relationship (e.g., Donaldson & Blanchard, 1995) between anxiety and job performance.

A careful review of Table 1 also reveals that past studies have failed to find evidence of curvilinear effects between anxiety and performance in work contexts. This is not surprising, as three main issues constrain support for uncovering a curvilinear relationship between anxiety and performance. First, none of the studies included in Table 1 explicitly reported testing for curvilinear effects. It is impossible to find such effects if they are not considered.

Second, many studies that have found a negative linear relationship between anxiety and performance precluded a test of the full range of anxiety. That is, many have focused on high anxiety performance situations or occupations, such as police officers (e.g., Nieuwenhuys & Oudejans, 2010) or high-pressure sales personnel (e.g., Verbeke & Bagozzi, 2000). Such studies may have inadvertently failed to capture low levels of anxiety. This precludes an examination of the linear and nonlinear effects underlying the anxiety-performance relationship. Third, as described in the following text, past research has not pinpointed the mechanisms underlying the association between anxiety and performance. This is critical, as we argue that the curvilinear relationship lies in the relationship between workplace anxiety and the mechanisms, rather than between anxiety and performance directly. As such, neither a linear or curvilinear relationship is sufficient for understanding the complex relationship between anxiety and performance. Instead, both are incorporated in our model (see Figure 1).

Evidence of curvilinear relations between stress and performance is also weak (e.g., Jamal, 1985). Notably, stress-related research makes a distinction between negative stress (distress) and positive stress (eustress; Selye, 1987). The extent to which stress reflects distress or eustress is dependent on an individual's interpretation and reaction to external stressors (Selye, 1987). Although the negative effects of distress have dominated the stress literature (e.g., Ganster & Rosen, 2013), research on eustress suggests the potential for stress-related constructs to increase performance (e.g., Hargrove, Nelson, & Cooper, 2013).

Summary

The inconsistent findings with respect to anxiety and performance present a puzzle: When is workplace anxiety positively related and when is workplace anxiety negatively related to job performance? Despite decades of research, our understanding of this question is limited in three important ways. First, past work has not theorized the distinct processes through which dispositional and situational workplace anxiety leads to lower or higher levels of job performance. This is an important constraint, as understanding the mechanisms through which dispositional and situational workplace anxiety can increase or decrease performance would provide clarity to past inconsistent findings. Second, past research has not delineated boundary conditions through which dispositional and situational workplace anxiety may facili-

¹ A close inspection of these models reveals that construct and outcome are confounded. Participants were asked to make a subjective judgment of whether they interpreted their experience of anxiety as debilitating or facilitative, regardless of whether they were aware of its effect and regardless of whether anxiety actually had a positive or negative impact on performance. In other words, rather than objectively assessing whether anxiety leads to performance, participants were asked to interpret their own anxiety in relation to their performance. Nevertheless, these psychological domains suggest the possibility of a bright side of anxiety.

² The original studies, using mice as subjects, tested the relation between punishment (administered through electric shock) and learning (Teigen, 1994) and were completely dissociated from the term anxiety. Yet, researchers have consistently cited Yerkes & Dodson (1908) as supporting the positive relations between various concepts (e.g., anxiety) and outcomes (e.g., performance). Further, research suggesting a curvilinear relation between anxiety and performance has not pinpointed the underlying mechanisms.

Table 1
Empirical Studies Examining Anxiety and Job Performance

Study	N	Sample	Operationalization of anxiety	Operationalization of performance	Relation between anxiety and performance
Barling, Rogers, & Kelloway (2001)	292	Female employees in Canada (nurses, social workers, child and behavior management specialists)	Dispositional anxiety	Self-reported interpersonal job performance using 20-item measure	Dispositional anxiety not significantly related to interpersonal job performance ($r = -.05$)
Donaldson & Blanchard (1995)	345	Employees from four organizations in southern California	Dispositional anxiety	Supervisor-rated performance on 5 items (quantity, quality, cooperation, initiative, overall performance) over 6 months	Dispositional anxiety not significantly related to performance ($r = .03$)
Guilford (1952)	208 143	Executives (208) and supervisors (143) of large grocery chain	Dispositional anxiety	Job performance assessed by training staff and superintendents	For executives, dispositional anxiety not significantly related to performance ($r = .02$); for supervisors, anxiety significantly related to performance ($r = .18$)
Kagan, Kagan, & Watson (1995)	367	Employees of the Emergency Medical Service of the Houston Fire Department	Situational anxiety	Letters of commendation from the public	Situational anxiety not significantly related to number of letters of commendation from public ($r = -.10$)
Kouchaki & Desai (2015)	74	Study 6: Employees from various organizations	Dispositional anxiety	Supervisor-rated employee task performance using 7 items	Dispositional anxiety significantly related to performance ($r = -.43$)
McCarthy, Trougakos, & Cheng (2016)	267	Police officers across Canada	Dispositional anxiety	Supervisor-rated police officer job competencies using 20-item scale developed from a job analysis	Dispositional anxiety significantly related to performance ($r = -.16$)
Mughal, Walsh, & Wilding (1996)	48	Study 1: Insurance sales consultants in London	Dispositional anxiety	Objective indicators: Commission volume, number of sales closed, appointments made, people seen, hours worked	Study 1: Dispositional anxiety significantly related to performance ($r = .28$ to $.32$)
Murphy, Duxbury, & Higgins (2006)	51 2507	Study 2: Employees from six offices of various companies in London Large financial service organization across Canada	Dispositional anxiety Dispositional anxiety	Objective indicators: Commission volume, number of sales closed, appointments made, people seen, hours worked Self-reported 9-item measure of positive and negative productivity	Study 2: Dispositional anxiety significantly related to performance ($r = .30$ to $.40$) Dispositional anxiety significantly related to positive productivity ($r = -.10$) and negative productivity ($r = .35$)
Nieuwenhuys & Oudejans (2010)	7	Police officers	Situational anxiety	Performance on a shooting exercise evaluated by number of hits on each designated target area	Situational anxiety significantly related to performance (M of shooting accuracy: high anxiety = 47.63%; low anxiety = 70.36%)
Perkins & Corr (2005)	367	Managers from a global securities company from U.K.	Dispositional anxiety	Supervisor-rated using two 6-item subscales: current job performance and 160-item management competency questionnaire	Dispositional anxiety negatively related to performance for managers with low ability, positively related for managers with high ability (r not provided)

(table continues)

Table 1 (continued)

Study	<i>N</i>	Sample	Operationalization of anxiety	Operationalization of performance	Relation between anxiety and performance
Pitt, Berthon, & Robson (2000)	113	Industrial salespeople from European vehicle manufacturer in six countries in Europe and Asia	Dispositional anxiety	Supervisor-rated using 1 item	Dispositional anxiety significantly related to performance ($r = -.44$)
Pyc, Meltzer, & Liu (2016)	232	Coordinator of care nurses for non-profit home health care agency in Northern U.S.	Dispositional anxiety	Supervisor-rated using 5-item performance scale	Dispositional anxiety significantly related to performance ($r = -.20$)
Regehr, LeBlanc, Jelley, & Barath (2008)	84	Police recruits enrolled in basic constable training program at Ontario Police College	Situational anxiety	Experts provided ratings of specific actions taken during videotaped work simulation	Situational anxiety not significantly related to performance (r s ranged from $-.08$ to $.10$)
Rego & Cunha (2008)	199	Employees from 118 organizations	Dispositional anxiety	Self-reported 4-item questionnaire	Dispositional anxiety significantly related to performance ($r = .24$)
Reio & Callahan (2004)	233	Employees in service industry companies in U.S.	Situational and dispositional anxiety	Self-reported 6-item questionnaire	Situational anxiety ($r = -.07$) and dispositional anxiety ($r = -.12$) not significantly related to performance
Saks (1996)	152	Newly hired entry-level accountants from 10 accounting firms in Canada	Dispositional anxiety	Supervisor-rated technical, interpersonal, academic, administrative, and overall job performance	Dispositional anxiety not significantly related to any dimension of performance or overall performance (r s ranged from $.02$ to $-.20$)
Schell & Grasha (2000)	75	Undergraduate students from University of Cincinnati	Situational anxiety	Simulated pharmacy dispensing task, filling mock orders	Situational anxiety significantly related to performance (more errors, $\beta = .33$)
Slaski & Cartwright (2002)	224	Middle managers working for a major U.K. retailer	Dispositional anxiety	Supervisor-rated using 64-item competency framework	Dispositional anxiety significantly related to performance ($r = -.42$)
Spector, Dwyer, & Jex (1988)	181	Female secretaries from University of South Florida	Situational anxiety	Supervisor-rated performance relative to other secretaries on typing speed, typing accuracy, receptionist duties, administrative business, and maintaining workload	Situational anxiety significantly related to performance ($r = -.16$)
Srivastava & Krishna (1980)	160	Semi-skilled workers from textile mill in India	Dispositional anxiety	Total units of production of each worker over five months	Dispositional anxiety significantly related to productivity ($r = -.67$)
Steen, Firth, & Bond (1998)	362	Nurses from 12 hospitals in England	Situational anxiety	Supervisor-rated performance: errors, effectiveness, tolerance with patients, interpersonal interactions	Situational anxiety not significantly related to any component of performance (r not provided)
Verbeke & Bagozzi (2000)	189	Mortgage sellers from subdivision of a large Dutch bank	Situational anxiety	Self-reported 5-item sales volume, 4-item communication quality during sales interaction	Situational anxiety significantly and negatively related to communication quality and sales volume (r s not provided)

tate and debilitate job performance. This is important in outlining a comprehensive model of the workplace anxiety and job performance relationship. Third, past research has failed to consider an integrative model of dispositional and situational workplace anxiety and job performance that considers both the “dark” and “bright” sides. The TWA overcomes each of these concerns, as it incorporates the processes and conditions through which both dispositional and situational workplace anxiety may facilitate and debilitate typical and episodic performance. In doing so, it answers the following questions: Can dispositional and situational workplace anxiety both debilitate and facilitate job performance? What is the process through which dispositional and situational workplace anxiety leads to job performance? When might dispositional and situational workplace anxiety facilitate or debilitate job performance?

Theory of Workplace Anxiety

The TWA is divided into two levels of analysis: Relations between workplace anxiety and job-related performance at the dispositional (i.e., between-person) level and relations between workplace anxiety and job-related performance at the situational (i.e., within-person) level (see Figure 1). The specific components of this model are described in detail in the following text. We begin at the dispositional level of analysis, which is represented in the top portion of Figure 1, then move to the situational level of analysis, represented in the bottom portion.

In alignment with the dispositional and situational components of workplace anxiety, we distinguish between typical and episodic performance. *Typical performance* is characterized by routine task performance on a day-in, day-out basis (Cronbach, 1960; Sackett et al., 1988). Typical performance entails carrying out multiple tasks over an extended period of time. These tasks often become habitual and require employees to draw on various cognitive and personal resources, such as attention, effort, and persistence. In contrast, *episodic performance* represents performance over short periods of time (Beal et al., 2005; Motowidlo et al., 1997). As described by Motowidlo and colleagues (1997), performance episodes within a given work day are often segmented, such that there are periods when employees are not contributing to organizational goals, and periods when employees are contributing to organizational goals. Episodic performance is aligned with these latter periods in which employees are contributing to organizational goals. Thus, episodic performance episodes often require concentrated effort and persistence, such as solving a technical problem, engaging in a business negotiation, and facilitating a corporate meeting. These types of performance episodes demand an individual’s undivided attention for a task of relatively short duration. Thus, consistent with distal-proximal frameworks (Lanaj, Chang, & Johnson, 2012), we align dispositional workplace anxiety with typical job performance situations, and situational workplace anxiety with episodic task performance situations. At the same time, we note that multiple episodic performance episodes may amalgamate into typical job performance (see Figure 1; Motowidlo et al., 1997).

Dispositional Workplace Anxiety and Typical Job Performance

Determinants of dispositional workplace anxiety. Drawing from the broader psychological literature (clinical, stress, sport, music, and educational psychology), we advance employee characteristics as core determinants of dispositional workplace anxiety.³

Employee characteristics. Employee characteristics reflect employees’ unique styles of interacting with the workplace, as well as their own perceptions of work situations (cf., Mischel & Shoda, 1995). These include psychological, cognitive, physical, and behavioral differences. The characteristics that are most directly linked to workplace anxiety include demographics, core self-evaluations, and health.

Demographics. The core demographics related to workplace anxiety are gender, age, and job tenure. In terms of *gender*, research consistently reports higher levels of anxiety among women than among men (e.g., Barrett, Robin, Pietromonaco, & Eyssell, 1998). Women also have reported higher levels of anxiety in particular work contexts, such as prior to contract negotiations (Brooks & Schweitzer, 2011) and during job interviews (Feeney, McCarthy, & Goffin, 2015). There are a number of reasons why women experience higher levels of anxiety. First, biological factors, such as genetic predispositions, physiological reactivity, and hormonal influences may predispose women to experience higher levels of anxiety across different contexts (see McLean & Anderson, 2009 for a review). Second, evolutionary factors, such as the need for women to nurture their family, may also contribute to increased levels of anxiety among women in the face of threat (Craske, 2003). Finally, historical and cultural conditions faced by women may lead to heightened workplace anxiety. In fact, the increase of women in the workplace since the 1960s has been identified as one of the most important societal trends affecting stress research (Bliese et al., 2017). Women have faced discrimination at work since their entry into the workforce (Kanter, 1993), which has led to wage disparity, low-level jobs, glass ceilings (Padavic & Reskin, 2002), and higher levels of anxiety (Klonoff, Landrine, & Campbell, 2000). Women also face inequitable family demands, as they are often expected to meet the majority of family obligations while balancing their careers (Barnett & Baruch, 1987). In turn, the struggle to balance work and family roles has been consistently associated with heightened anxiety (Allen, Herst, Bruck, & Sutton, 2000).

An employee’s *age* and *job tenure* also play important roles in workplace anxiety, such that older (Roberts, Walton, & Viechtbauer, 2006) and more experienced workers (Motowidlo et al., 1986) are likely to exhibit lower levels of anxiety. Employees become adaptive and proficient in their work as their tenure and experience increases (Katz, 1980). Employees also gain job knowledge and skill development that increases with tenure (Tesluk & Jacobs, 1998). Meta-analytic findings have demonstrated a positive relationship between organizational tenure and in-role performance (Ng & Feldman, 2010). Over time, challenging tasks

³ Note that our list is not exhaustive. We cover the most salient antecedents to workplace anxiety and note that stressor-strain models also consider relevant stressors that lead to workplace strain (for a review, see Jex, 1998; Sonnentag & Frese, 2013).

become routinized and employee-based uncertainty is reduced (Katz, 1980).

Core self-evaluations. Core self-evaluations, which are based on the appraisal of one's worth, are another core determinant of workplace anxiety. Core self-evaluations include self-esteem, self-efficacy, emotional stability, and locus of control (Judge, Erez, Bono, & Thoresen, 2002). Employees with high core self-evaluations tend to perceive themselves in a positive manner and assess themselves as capable, worthy, and in control (Judge, Van Vianen, & De Pater, 2004). This provides the strength and stability to feel less overwhelmed and to meet corporate challenges (Jex, Bliese, Buzzell, & Primeau, 2001). Thus, high core self-evaluations are likely to reduce chronic levels of workplace anxiety. Employees with low core self-evaluations, in contrast, are more likely to internalize their experiences and attribute failure to their inabilities, thus elevating anxiety. Empirical evidence supports these propositions, such that low self-esteem has been meta-analytically found to relate to high anxiety levels (Sowislo & Orth, 2013). Similarly, self-efficacy has been found to be negatively related to general anxiety levels and to predict the onset of anxiety disorders (Muris, 2002). Considerable evidence also has suggested that external locus of control, the belief that important outcomes are uncontrollable, is a direct antecedent of dispositional anxiety (for a review, see Chorpita & Barlow, 1998).

Physical health. Physical health is another important antecedent of workplace anxiety, such that workers with high levels of physical well-being are likely to exhibit lower levels of workplace anxiety (e.g., Ströhle, 2009). Indeed, physical fitness and exercise have been found to improve self-concept and mood (Anderson & Brice, 2010), stimulate positive affect (Wichers et al., 2012), and protect against major illnesses (Lawlor & Hopker, 2001). Relatedly, meta-analytic research has found that poor physical health is related to high levels of anxiety (Mitchell, Ferguson, Gill, Paul, & Symonds, 2013) and that exercise is an effective method for reducing anxiety (Long & van Stavel, 1995), in part, because it provides a distraction from anxiety (Bahrke & Morgan, 1978) and/or a mood enhancer to buffer against anxiety (Morgan, 1976).

Proposition 1: Employee demographics (gender, age, tenure), core self-evaluations, and physical health are determinants of dispositional workplace anxiety.

The debilitating effect of dispositional workplace anxiety on typical performance. As indicated, dispositional workplace anxiety represents a chronic experience of workplace anxiety. Given the longer term nature of dispositional anxiety, it is likely to have a stronger impact on typical job performance than situational anxiety. This occurs through a drain on resources exhibited by emotional exhaustion. Conservation of resources theory (COR; Hobfoll, 1989) suggests that individuals carry a finite store of resources, such as energy and focus, and these resources become depleted with use. A key proposition of COR theory is the long-term focus of resource depletion that, if not replenished over time, results in chronic symptoms, such as emotional exhaustion (Maslach & Leiter, 2008). Given that typical job performance entails the sustained execution of daily tasks and requires regulatory resources, such as effort (Sackett et al., 1988), we argue that the long-term nature of dispositional workplace anxiety debilitates typical performance through emotional exhaustion. In

other words, the sustained nature of dispositional anxiety will lead to a depletion of resources that is manifested in emotional exhaustion. Emotional exhaustion, in turn, reduces employee motivation to perform effectively (e.g., Halbesleben & Bowler, 2007), distances employees from their work, and subsequently lowers performance (McCarthy et al., 2016).

Proposition 2: Emotional exhaustion mediates the relationship between dispositional workplace anxiety and typical performance. Dispositional workplace anxiety exerts a positive linear relationship with emotional exhaustion. In turn, emotional exhaustion exerts a negative linear relationship with typical performance.

The facilitating effect of dispositional workplace anxiety on typical performance. We advance self-regulatory processing as the core mechanism that guides dispositional workplace anxiety to facilitate typical job performance. Anxiety serves an information function by signaling when a discrepancy exists between desired and actual goal progress (Carver & Scheier, 2011), for example, toward task completion. This signal can lead to greater effort and an increase in task engagement (Schwarz & Bless, 1991).

We use self-regulatory processes in a broader sense than the regulation of attention used in other models (e.g., Beal et al., 2005) and refer also to the regulation of thoughts, feelings, and behaviors. Self-regulatory processing applies to both short- and long-term resources, as is evident from research that has examined both short- and long-term effects of self-regulation (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Carver et al., 2008). We also align dispositional levels of workplace anxiety with a higher-order self-regulatory system that is reflective in nature (i.e., long-term, trait-like), and, consistent with Carver and colleagues (2008), differentiate this from a lower-order, self-regulatory system that is linked to transient feelings and is reflexive in nature (i.e., short-term, state-like). Specifically, dispositional workplace anxiety is likely to facilitate typical performance through its effects on a slower, reflective, and unemotional, self-regulatory system that searches carefully for information, deliberates on decisions, and anticipates consequences of actions before acting (Carver et al., 2008). This is consistent with the chronic nature of dispositional anxiety as it is associated with a calculative or effortful mindset that is aligned with the long-term nature of anxiety. This allows employees who experience chronic levels of workplace anxiety to plan for and strategize goal-oriented behaviors and actions toward facilitative performance.

The core process by which self-regulatory processing can facilitate performance for employees experiencing chronic dispositional anxiety is attendance to task goals. Individuals self-regulate by setting challenging goals, which allows them to adjust and strengthen regulatory resources by monitoring progress and increasing future goal commitment (Locke, 1996). Challenging goals facilitate performance through such strategies as increased effort and persistence (Locke & Latham, 1990). Thus, employees with dispositional anxiety are more likely to commit to goal achievement and delegate behaviors and actions to meet desired outcomes. Thus, anxious employees may invest more effort and plan strategically to reach their goals and avoid negative outcomes (Norem & Chang, 2002). This provides anxious employees a long-term strategy to manage anxiety by confronting worries and developing action plans (Norem, 2008). This is consistent

with research on goal pursuit, which emphasizes the importance of breaking abstract goals into small, concrete steps (Gollwitzer, 1999). Similar to Carver and Scheier's (1998) notion of an implemental mindset, where action takes precedence over rumination once a decision has been made, employees experiencing chronic workplace anxiety mobilize their resources and direct their actions to achieve task goals. Thus, anxious individuals can use reflective self-regulatory behaviors to make needed adjustments to facilitate performance.

Easterbrook's (1959) cue-utilization theory provides some insights into the shape of this relationship. This theory posits that individuals who have high levels of general anxiety are attuned to a number of cues in their general environment. These cues may be peripheral cues or central cues directly relevant to the job. Individuals with moderate levels of anxiety are likely to be optimally aroused and can attend to large sets of central cues while excluding peripheral cues. In contrast, individuals with low levels of anxiety are likely to be attuned to many cues, including peripheral cues that are not relevant to the job, thus inhibiting performance. Similarly, individuals with high levels of anxiety are unable to process a large set of cues, including cues that are centrally related to the job, leading to lower performance.

Although this theory points to a curvilinear relationship, we argue that neither a direct linear, nor a direct curvilinear relationship between dispositional workplace anxiety and typical performance is sufficient for understanding the complex nature of this important relationship. Instead, the TWA suggests that the curvilinear relationship lies in the relationship between dispositional workplace anxiety and the mechanism, rather than between anxiety and performance directly. To be specific, dispositional workplace anxiety should exhibit a curvilinear (inverted-U) relationship with reflective self-regulatory processing. Moderate levels of anxiety should lead to the highest levels of reflective self-regulatory processing because individuals at this level have the optimal amount of arousal to facilitate monitoring progress toward completion of the task. At low levels of anxiety, individuals lack the arousal necessary to monitor their progress. At high levels of anxiety, extreme levels of arousal preclude the ability to monitor task progress. Reflective self-regulatory processing is in turn positively related to typical performance.

Proposition 3: Dispositional workplace anxiety exerts a curvilinear (inverted U-shaped) relationship with reflective self-regulatory processing, such that moderate levels of dispositional workplace anxiety lead to the highest levels of reflective self-regulatory processing, while low and high levels of dispositional workplace anxiety lead to the lowest levels of reflective self-regulatory processing. Reflective self-regulatory processing, in turn, exerts a positive linear relationship with typical performance.

Situational Workplace Anxiety and Episodic Job Performance

The bottom portion of our model focuses on situational workplace anxiety (see Figure 1). As illustrated, situational workplace anxiety is directly influenced by dispositional workplace anxiety, as dispositional anxiety reflects a propensity to experience situational anxiety during stressful tasks or events (Spielberger, 1985). We illustrate this effect in Figure 2. The x-axis reflects work-based situations that may provoke higher or lower levels of workplace anxiety, such as a job interview, a performance appraisal meeting,

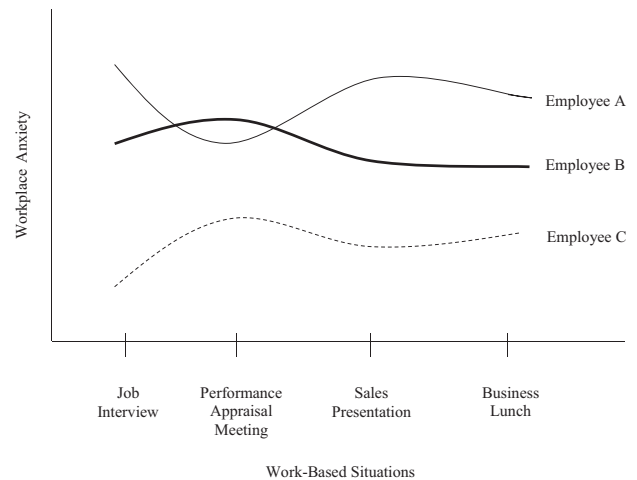


Figure 2. The interactive nature of dispositional and situational workplace anxiety.

a sales presentation, or a business lunch. The y-axis reflects levels of experienced workplace anxiety. The three lines reflect levels of workplace anxiety among three different employees. As illustrated, Employee A's dispositional level of workplace anxiety is higher than Employee B's, which is in turn higher than Employee C's. Importantly, however, there are also fluctuations across levels of workplace anxiety that are a function of specific situations. As shown in the figure, Employee A experiences lower levels of workplace anxiety than Employee B during performance appraisal meetings. In other words, there are also differences in experiences of situational anxiety. Thus, while an employee with high levels of dispositional workplace anxiety is more likely to have higher situational levels of anxiety in specific situations, the two are distinct, such that certain situations will elicit higher or lower levels of workplace anxiety in spite of dispositional tendencies.

Importantly, dispositional workplace anxiety can also be characterized by an accumulated distribution of situational workplace anxiety experiences. Although dispositional workplace anxiety directly influences the experience of situational anxiety, situational anxiety, in turn, can affect dispositional levels (cf. Fleeson, 2001). That is, whereas situational anxiety is experienced occasionally by everyone, situational anxiety will vary in intensity and frequency as a function of how individuals generally perceive stressful situations (Spielberger, 1985). Thus, dispositional workplace anxiety and situational workplace anxiety reciprocally influence each other.

Proposition 4: Dispositional workplace anxiety has a reciprocal influence with situational workplace anxiety.

Determinants of situational workplace anxiety. We draw from the broader psychological literature to advance situational characteristics and job characteristics as the core antecedents of situational workplace anxiety. Given that situational workplace anxiety and dispositional workplace anxiety are reciprocally related, we note that the proposed antecedents may cross, such that stable employee characteristics may potentially affect situational levels of workplace anxiety, and situational and job characteristics may potentially affect dispositional levels of workplace anxiety.

Situational characteristics. Drawing from theories of emotion, affect, and stress, we advance three situational characteristics as core determinants of situational workplace anxiety – emotional labor demands, task demands and organizational demands.

Emotional labor demands. The emotional labor required for the task is a direct determinant of situational anxiety. Emotional display rules are the expressions that employees are expected to display or suppress in the workplace (Ashforth & Humphrey, 1993). For example, the requirement of “service with a smile” (Barger & Grandey, 2006) may be particularly exhausting in hectic jobs with a high turnover of customers, which would lead to higher levels of experienced anxiety. Given the negative connotation that facial displays of anxiety carry, it is also likely to differ according to the task. For example, conducting an audit or working in emergency medical situations may require display rules that support anxiety, because hypervigilance is rewarded. In contrast, giving a speech that requires confidence or serving customers does not carry display rules that support anxiety. Anxious facial cues and accompanying body language cues may lead to the expression or suppression of anxiety, which will affect the level of experienced situational workplace anxiety. Thus, high situational anxiety is likely to manifest in tasks requiring high emotional labor demands.

Task demands. Task demands also play an important role in determining situational workplace anxiety. We draw from stress theories which posit that stressors, such as task deadlines, task difficulty, and task ambiguity contribute to strain reactions (Katz & Kahn, 1978), such as workplace anxiety. These demands indicate uncertainty with respect to meeting timelines and role expectations, which present as potential threats to employees. In support of these propositions, challenge (e.g., workload) and hindrance (e.g., role ambiguity) stressors have been found to be positively related to anxiety (Rodell & Judge, 2009). There is also evidence that employees tend to overestimate the negative impact of task demands to themselves as compared with others (Moore, 2005). Given that situational workplace anxiety is a function of individual cognitions, high task demands increase short-term feelings of employee anxiety.

Organizational demands. Organization demands, such as organizational changes, lack of job security, and office politics, are likely to activate workplace anxiety (e.g., Astrachan, 2004). Consistent with models of affect (e.g., Weiss & Cropanzano, 1996), work events serve as proximal causes of affective reactions. A key mechanism of organizational demands on the experience of workplace anxiety is the uncertainty underlying organizational processes and outcomes, which serves to arouse threat-based reactions (Ferris et al., 1996). In support of these propositions, past research has found that organizational demands, such as perceived organizational change (Callan, Terry, & Schweitzer, 1994), contribute to the experience of anxiety.

Proposition 5: Emotional labor demands, task demands, and organizational demands are determinants of situational workplace anxiety.

Job characteristics. Characteristics of the job also have a direct influence on situational workplace anxiety. Drawing from various stress theories (e.g., job characteristics model; Hackman & Oldham, 1980; demand–control–support models; Karasek & Theo-

rell, 1990), we position job type, job demands, and job autonomy as the job characteristics that are most directly linked to situational workplace anxiety.

The first job characteristic, *job type*, is likely to trigger high levels of workplace anxiety, as fast-paced and competitive corporate environments have been found to foster high-stress cultures (e.g., sales cultures; Godard, 2001). Stressful work environments are characterized by unpredictability, ambiguity, and uncontrollability, all of which are factors that contribute to the experience of anxiety (cf. Sonnentag & Frese, 2013). The second job characteristic, *demands of the job*, is defined as psychological, social, physical, and/or organizational characteristics that exert frequent pressure on employees (Karasek, 1979). Examples include impending deadlines, high workloads, and role conflict (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands have been found to be significantly related to situational anxiety in a number of field studies (e.g., Dawson, O’Brien, & Beehr, 2016; Sprigg, Stride, Wall, Holman, & Smith, 2007), including daily diary studies (e.g., van Hooff, 2015). The third job characteristic is *perceived job autonomy*, which reflects the extent to which employees feel they have control over how to accomplish their work as it relates to tasks, decisions, or use of resources (Spector, 1986). A wide body of research has indicated that employees who feel they have low levels of control have a tendency to experience higher levels of anxiety (see meta-analysis by Spector, 1986). Job autonomy has also been found to be related to job anxiety in call center employees (e.g., Sprigg et al., 2007).

Proposition 6: Job type, job demands, and job autonomy are determinants of situational workplace anxiety.

The debilitating effect of situational workplace anxiety on episodic performance. In contrast to dispositional workplace anxiety, which is associated with day-to-day performance, situational workplace anxiety focuses on precise work tasks. When employees feel high levels of situation-based anxiety, it is difficult for them to focus on the specific task at hand, leading to subsequent performance decrements. In other words, employees who are dealing with situation-specific workplace anxiety experience cognitive interference. Cognitive interference refers to the tendency to spend a disproportionate amount of cognitive processing ruminating on task-irrelevant, or off-task, thoughts (Sarason, Pierce, & Sarason, 1996). For example, employees who are anxious about a certain task may worry about their performance on the task and expect failure, and these feelings of inadequacy take precedence in their thoughts. They may also spend an unreasonable amount of cognitive processing thinking about what coworkers are doing, or the list of tasks still waiting for them to complete. Finally, they may experience thoughts that are self-deprecating, self-preoccupying, or insecure in nature (Sarason, 1984). This intrusive thinking prevents full concentration on work tasks and causes cognitive overload and mental distraction (Sarason, Sarason, Keefe, Hayes, & Shearin, 1986). In turn, this interferes with the mental processes required of performing a task, leading to fewer resources for task completion, which will decrease performance (Clore, Schwarz, & Conway, 1994; Loewenstein & Lerner, 2003).

We propose that in episodic performance situations requiring focused levels of concentration, situational workplace anxiety, itself characterized as a situation-specific experience of anxiety, is

likely to affect performance through cognitive interference. This aligns with past models of anxiety and performance in various domains of psychology (e.g., Eysenck et al., 2007; Mueller, 1992; Wine, 1980), including the episodic model of affective influences advanced by Beal and colleagues (2005), which suggests that negative affect leads to off-task attentional demands that, in turn, reduces performance. It is also aligned with empirical research suggesting that situation-based anxiety is significantly related to performance on tasks that demand focused attention for short bursts of time, such as test-taking situations (Hembree, 1988) and sports competitions (Kleine, 1990).

Refining past frameworks on curvilinear relationships (Easterbrook, 1959), we argue that cognitive interference should be considered with respect to the varying levels of situational workplace anxiety employees experience. Thus, we propose that situational workplace anxiety exhibits a curvilinear relationship, not directly with performance, but with the mechanism. To be specific, situational workplace anxiety should exhibit a curvilinear (U-shaped) relationship with cognitive interference, such that moderate levels of situational workplace anxiety should lead to lowest levels of cognitive interference. At moderate levels of situational workplace anxiety, individuals are able to attend to task-relevant cues while excluding task-irrelevant cues. At low levels of situational workplace anxiety, however, individuals are attuned to too many task-irrelevant cues, while at high levels, individuals are similarly likely to spend their cognitive resources focused on task-irrelevant issues. Cognitive interference is in turn negatively related to episodic performance.

Proposition 7: Situational workplace anxiety exerts a curvilinear (U-shaped) relationship with cognitive interference, such that moderate levels of situational workplace anxiety lead to the lowest levels of cognitive interference while high and low levels of situational workplace anxiety lead to the highest levels of cognitive interference. Cognitive interference, in turn, exerts a negative linear relationship with episodic performance.

The facilitating effect of situational workplace anxiety on episodic performance. Although the predominant perspective in the literature is that anxiety debilitates performance through a cognitive pathway, we argue that focusing solely on cognitive resources in the form of cognitive interference is an oversimplification, as it is likely to consist of both a cognitive and a motivational path. The motivational path is represented by the self-regulatory processing behaviors that anxious employees engage in to exert self-control (cf. Lazarus, 1991). In fact, situational workplace anxiety is experienced as an unpleasant feeling that inherently triggers motivation to reduce or eliminate anxiety (Spielberger, 1985).

We focus on the self-regulatory processes that involve one's thoughts, behaviors, actions, and emotions. Here, we align situational workplace anxiety with a lower order self-regulatory system that is more automatic and reflexive in nature to that of the previously described reflective self-regulatory system associated with chronic dispositional workplace anxiety (Carver et al., 2008). Elevated levels of situational workplace anxiety are accompanied by a corresponding elevation in arousal (Gray, 1987). This increase in arousal can energize and propel workers to facilitate task

completion by promoting behaviors that help employees monitor their goal progress on the specific task at hand. For example, self-regulatory strategies that entail self-monitoring enable employees to distribute resources to particular behaviors and monitor consequences of those behaviors. Specifically, employees direct more resources to supervising their progress during task performance. Self-evaluation serves as a cross-check, comparing current states with ideal future goal states. For example, employees may keep track of their performance and evaluate whether they have met their task objectives. Finally, self-reaction refers to affective judgments, as well as task-specific capabilities, which are one's own expectations of capability (Kanfer & Ackerman, 1989). For example, an employee may make note of any mistakes so as to learn from them in the future.

Importantly, feelings of anxiety during specific performance episodes (e.g., making an important presentation to a potential client) are likely to trigger the lower-order self-regulatory system that is intuitive and emotional, as this system responds to emotions, such as anxiety, that arise based on situational cues (Carver et al., 2008). As Carver et al. (2008) stated, "This system dominates when speed is needed (as when a situation is emotionally charged) and also when processing resources are diminished. That is, it requires relatively little capacity and thus can function under suboptimal conditions" (p. 914). In support of this proposition, inducing arousal in threatening situations has been found to lead to higher levels of task performance in specific performance episodes, such as singing performances and public speaking (Brooks, 2014). Recent research has also demonstrated that situational anxiety leads to increased effort in self-regulation behaviors, such as self-control effort (Prem, Kubicek, Diestel, & Korunka, 2016), enabling employees who are anxious about their performance to overcome motivational deficits and facilitate performance through additional effort. Self-regulatory processing is also enacted by anxious employees through the regulation and control of affective states by keeping feelings of anxiety at bay (Kanfer, Ackerman, & Heggstad, 1996).

Thus, we expect situational workplace anxiety to exhibit a curvilinear (inverted-U) relationship with reflexive self-regulatory processing. Moderate levels of anxiety should lead to the highest levels of reflexive self-regulatory processing, as individuals are sufficiently activated to exert regulatory behaviors toward performance strategies. At low levels of anxiety, individuals lack the arousal necessary to engage in self-regulatory behaviors, while at high levels of anxiety, extreme levels of arousal render self-regulatory processing difficult. Reflexive self-regulatory processing is in turn positively related to episodic performance.

Proposition 8: Situational workplace anxiety exerts a curvilinear (inverted U-shaped) relationship with reflexive self-regulatory processing, such that moderate levels of situational workplace anxiety lead to the highest levels of reflexive self-regulatory processing, whereas low and high levels of situational workplace anxiety lead to the lowest levels of reflexive self-regulatory processing. Reflexive self-regulatory processing, in turn, exerts a positive linear relationship with episodic performance.

Relations Among Cognitive Interference, Self-Regulation, and Emotional Exhaustion

Theoretically, it is possible to be engaged in both self-regulatory and cognitive interference processes almost simultaneously. For example, one can be focused on monitoring progress toward deriving a budget plan for an upcoming meeting, and within milliseconds, be distracted by thoughts about dinner (cf. Rubinstein, Meyer, & Evans, 2001). It is important to note, however, that self-regulatory and cognitive interference processes by no means represent two ends of the same continuum; they represent independent constructs and are derived from separate theories (cognitive-motivational; Carver et al., 2008; Kanfer & Ackerman, 1989; cognitive processing; Wine, 1980). Cognitive interference reflects the propensity to focus one's attention on task-irrelevant thoughts and behaviors, akin to an attentional mechanism, whereas self-regulatory processing represents the active and effortful process of monitoring goal progress toward task completion, akin to a motivational regulatory mechanism.

Although self-regulatory processing does not necessarily require attentional resources (DeShon, Brown, & Greenis, 1996), attentional deficits in the form of cognitive interference can make it difficult to self-regulate (Collins & Jackson, 2015; Randall, Oswald, & Beier, 2014). Indeed, research on rumination suggests that individuals attempt to suppress unwanted thoughts (Gold & Wegner, 1995), draining them of resources that weaken their ability to maintain self-regulatory processing. Experimental research has demonstrated that rumination undermines performance on tasks that require self-regulation (Lisjak, Bonezzi, Kim, & Rucker, 2015). We propose:

Proposition 9: Cognitive interference has a negative effect on self-regulatory processing.

We also expect a positive relationship between self-regulatory processing and emotional exhaustion. Past work demonstrates that self-regulation is depleting and can lead to exhaustion (Grandey, 2000; Prem et al., 2016), particularly when there are insufficient cognitive resources available (Kanfer & Ackerman, 1989) or few opportunities to replenish depleted resources (Muraven & Baumeister, 2000). Consistent with past work, we propose:

Proposition 10: Self-regulatory processing has a positive effect on emotional exhaustion.

Boundary Conditions

In this section, we consider when dispositional and situational workplace anxiety will debilitate and facilitate typical and episodic performance. We extend our theoretical model by specifying three conditions through which dispositional and situational workplace anxiety will facilitate and debilitate performance: motivation, ability, and emotional intelligence.⁴

Motivation. Although self-regulatory processing is theorized to be the mechanism through which dispositional and situational anxiety facilitate performance, engaging in self-regulatory behaviors requires expending limited resources to adequately monitor progress and focus on the task at hand (Tice, Baumeister, Shmueli, & Muraven, 2007). These behaviors require effortful processing to compensate for anxious individuals' tendency to disengage from a

goal or task (e.g., Carver & Scheier, 1998). This is particularly salient for dispositionally anxious individuals, as dispositional anxiety represents a lasting tendency to experience nervousness across situations. As such, it is likely that it takes more for dispositionally anxious individuals to override their typical disengagement response in a high arousal situation and instead engage in reflective self-regulatory behaviors. Similarly, situationally anxious individuals require a boost to counteract the pull toward being distracted by task-irrelevant cues and instead engage in reflexive self-regulatory behaviors. Consistent with this notion, disjunctive motivation models (Carver & Scheier, 1998; Wright, 2008) suggest that individuals perform tasks either by engaging (investing effort) or disengaging (giving up). Importantly, individuals engage if they carry a deep feeling of task absorption, accompanied by confidence in their ability (Carver & Scheier, 1998). Thus, we propose that motivated anxious employees will invest the resources necessary to engage in self-regulatory processing behaviors.

Specifically, accomplishment striving may drive anxious individuals to engage in self-regulatory processing to monitor their progress on the task. Applied to work contexts, accomplishment striving reflects the extent to which employees strive toward reaching goals and the accomplishment of job-related tasks (Barrick, Stewart, & Piotrowski, 2002). It is characterized by high motivation to accomplish task-related goals, and reflects a high need for competence (Barrick et al., 2002). It involves the allocation of effort toward accomplishments, such as performance on work tasks. Individuals oriented toward accomplishment striving are more likely to direct the cognitive resources to focus on the task, increase effort, and try new task strategies. In line with this proposition, research suggests that motivation influences individuals' ability to monitor their goal progress (Inzlicht & Schmeichel, 2012). We thus propose that the curvilinear (inverted-U) relationship between workplace anxiety and self-regulatory processing is moderated by motivation. The inverted-U shaped relationship between anxiety and self-regulatory processing is strongest at low levels of motivation, moderate at moderate levels of motivation, and weakest at high levels of motivation. Thus, individuals with moderate levels of anxiety and high levels of motivation are most likely to engage in self-regulatory processing behaviors.

Proposition 11: Motivation moderates the relationship between (a) dispositional workplace anxiety and reflective self-regulatory processing, and (b) situational workplace anxiety and reflexive self-regulatory processing, such that there is a stronger curvilinear (inverted-U shaped) relationship between dispositional (situational) workplace anxiety and reflective (reflexive) self-regulatory processing when motivation is low.

We further propose that individuals with high dispositional anxiety and low motivation are more likely to experience emotional exhaustion. Anxious employees who are not driven to achieve their goals are less willing to learn new tasks and take up challenges in their work, and are less likely to attain success in their performance tasks. This is likely to increase difficulty picking

⁴ Although our model focuses on three salient boundary conditions, we acknowledge that other factors, such as task difficulty, may play a moderating role.

up new skills and require more effort to complete work tasks, which is likely to result in increased emotional exhaustion. In contrast, anxious employees with high levels of motivation are less likely to experience emotional exhaustion. Employees who are able to immerse themselves in the flow of work typically experience more positive emotions, which are energizing (Csikszentmihalyi, 2000). This counteracts employee resource drain and invigorates employees to push forward in their work. Thus, we propose:

Proposition 12: Motivation moderates the relationship between dispositional workplace anxiety and emotional exhaustion, such that the positive relationship is weaker when motivation is high.

Finally, individuals experiencing high situational anxiety that is accompanied by low motivation are likely to yield to distraction tendencies in the form of cognitive interference. Specifically, employees who are highly anxious about a task and lack the motivation to complete it will not invest the resources required for task completion and are likely to be distracted by task-irrelevant concerns that will debilitate task performance. Thus, we propose that the curvilinear (U-shaped) relationship between situational workplace anxiety and cognitive interference will be moderated by motivation. The U-shaped relationship between anxiety and cognitive interference is strongest at low levels of motivation, moderate at moderate levels of motivation, and weakest at high levels of motivation. Those with moderate levels of anxiety and high levels of motivation are least likely to experience cognitive interference.

Proposition 13: Motivation moderates the relationship between situational workplace anxiety and cognitive interference, such that there is a stronger curvilinear (U-shaped) relationship between situational workplace anxiety and cognitive interference when motivation is low.

Ability. We propose ability as a second critical boundary condition that will guide anxious individuals to engage in self-regulatory behaviors and make them less likely to experience exhaustion and to engage in cognitive interference. Specifically, the TWA positions ability as both general intelligence (Spearman, 1904) and skills acquired through on-the-job training (Latham & Seijts, 1998). Indeed, general cognitive ability is positively associated with job performance, and tests of cognitive ability remain a widely used and valid predictor of job performance (Schmidt, 2011), particularly for complex jobs. One mechanism for this effect is the acquisition of job knowledge, such that employees with high levels of ability acquire more job knowledge at a faster rate than those with low levels of ability (Schmidt, 2011). Of particular relevance, dispositional anxiety has been found to interact with cognitive ability in the work domain, such that worrying has demonstrated a negative relationship with performance for managers with low cognitive ability and a positive relationship with performance for managers with high cognitive ability (Perkins & Corr, 2005). Along a similar line, situational anxiety has been found to be positively related with rock climbing performance for experienced rock climbers (Hardy & Hutchinson, 2007).

Our model indicates that anxious individuals who possess high ability are more likely to have clear goals that can be achieved

through self-regulatory processes. We thus propose that the curvilinear (inverted-U) relationship between dispositional and situational workplace anxiety and self-regulatory processing will be moderated by ability. The inverted-U shaped relationship between anxiety and self-regulatory processing is strongest at low levels of ability, moderate at moderate levels of ability, and weakest at high levels of ability. Individuals with moderate anxiety and high ability are most likely to engage in self-regulatory processing behaviors.

Proposition 14: Ability moderates the relationship between (a) dispositional workplace anxiety and reflective self-regulatory processing, and (b) situational workplace anxiety and reflexive self-regulatory processing, such that there is a stronger curvilinear (inverted-U shaped) relationship between dispositional (situational) workplace anxiety and reflective (reflexive) self-regulatory processing when ability is low.

We further propose that individuals with high dispositional anxiety and low ability are more likely to experience emotional exhaustion. This group of individuals is more likely to draw from limited resources to attend to and accomplish task-related assignments and duties. The resulting resource drain will lead to emotional exhaustion (Hobfoll, 1989). In contrast, anxious employees with high ability are less likely to experience emotional exhaustion, as they rely on routinized behaviors to perform typical job tasks. This group of individuals can draw from a stronger skill set to perform job responsibilities, and they are therefore less likely to experience resource drain in the form of emotional exhaustion. In support of these propositions, research indicates that levels of experience and task competence reduce the effects of anxiety on performance (Hardy & Hutchinson, 2007; Lang & Lang, 2010).

Proposition 15: Ability moderates the relationship between dispositional workplace anxiety and emotional exhaustion, such that the positive relationship is weaker when ability is high.

In line with aforementioned theory and research, we argue that situationally anxious employees who have low ability are likely to engage in higher levels of cognitive interference. Anxious individuals tend to process less information than nonanxious individuals (Eysenck & Calvo, 1992). Combined with low ability, these individuals are likely to demonstrate slower learning, attentional bias, and distraction manifested in cognitive interference. We propose that the curvilinear (U-shaped) relationship between situational workplace anxiety and cognitive interference will be moderated by ability. The U-shaped relationship between anxiety and cognitive interference is strongest at low levels of ability, moderate at moderate levels of ability, and weakest at high levels of ability. Thus, individuals with moderate levels of situational anxiety and high levels of ability are least likely to experience cognitive interference.

Proposition 16: Ability moderates the relationship between situational workplace anxiety and cognitive interference, such that there is a stronger curvilinear (U-shaped) relationship between situational workplace anxiety and cognitive interference when ability is low.

Emotional intelligence. We further propose that emotional intelligence (EI) moderates the relationships between dispositional and situational workplace anxiety and the underlying mechanisms. EI reflects “the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought” (Mayer, Roberts, & Barsade, 2008, p. 511). EI comprises four components: (a) the ability to accurately perceive one’s own and others’ emotions, (b) the ability to understand emotions, (c) the ability to use emotions to facilitate one’s thinking, and (d) the ability to manage and regulate emotions for achieving specific goals (Mayer & Salovey, 1997).

We expect that EI will play a significant role in the extent to which dispositional and situational anxious employees have the capacity to self-regulate. Specifically, anxious individuals with high levels of EI have a stronger capacity for emotion regulation that enables them to engage in a full range of self-regulatory behaviors, such as self-monitoring (Porath & Bateman, 2006). In addition, anxious individuals who are emotionally intelligent are better able to understand when feelings of worry and apprehension are clouding their ability to focus and can readjust to self-regulate on the task at hand. We propose that the curvilinear (inverted-U) relationship between anxiety and self-regulatory processing will be moderated by EI. The inverted-U shaped relationship between anxiety and self-regulatory processing is strongest at low levels of EI, moderate at moderate levels of EI, and weakest at high levels of EI. Individuals with moderate anxiety and high EI are most likely to engage in self-regulatory processing behaviors.

Proposition 17: EI moderates the relationship between (a) dispositional workplace anxiety and reflective self-regulatory processing and (b) situational workplace anxiety and reflexive self-regulatory processing, such that there is a stronger curvilinear (inverted-U shaped) relationship between dispositional (situational) workplace anxiety and reflective (reflexive) self-regulatory processing when EI is low.

We also expect that dispositionally anxious individuals with high levels of EI leverage other abilities that help compensate for their experiences of anxiety, thereby mitigating experienced emotional exhaustion. Specifically, anxious individuals who are emotionally intelligent are adept at recognizing their symptoms of anxiety, conveyed as a unique set of emotional information (e.g., Izard, 1993). Research has demonstrated that those high on EI are better able to engage in affective forecasting, predicting how they will feel in response to certain events and detecting changes in their emotions (Schneider, Lyons, & Williams, 2005). Anxious individuals who are emotionally intelligent are also better able to use and manage feelings of anxiety to their advantage in the context of their goals. These individuals are skilled at using appraisal information akin to an emotional self-management strategy for coping with anxiety (Mayer, Salovey, & Caruso, 2008). This understanding of anxiety and effectively reappraising anxiety into more positive energies can provide more resources that protect against and alleviate emotional exhaustion.

In line with these propositions, research has linked high EI to adaptive responses to stress (Salovey, Stroud, Woolery, & Epel, 2002), enhancing overall psychological well-being (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006), and lowering depression (Carton, Kessler, & Pape, 1999) and anxiety (Bastian, Burns, &

Nettelbeck, 2005). Thus, anxious individuals who are high on EI are more likely to perceive their feelings of anxiety, understand its distracting effects, and use this information to manage their experience of worry, which enables them to conserve resources and minimize emotional exhaustion.

Proposition 18: EI moderates the relationship between dispositional workplace anxiety and emotional exhaustion, such that the positive relationship is weaker when EI is high.

EI is also expected to moderate the relationship between situational workplace anxiety and cognitive interference. Anxious individuals with high EI are likely to redirect attention away from cognitive and physical distractions and channel energy into cognitive processes and focus on the task at hand, whereas anxious individuals with low EI are more likely to attend to task-irrelevant information (Mayer et al., 2008). Thus, we propose that the curvilinear (U-shaped) relationship between situational anxiety and cognitive interference will be moderated by EI. The U-shaped relationship between anxiety and cognitive interference is strongest at low levels of EI, moderate at moderate levels of EI, and weakest at high levels of EI. Individuals with moderate levels of anxiety and high levels of EI are least likely to experience cognitive interference.

Proposition 19: EI moderates the relationship between situational workplace anxiety and cognitive interference, such that there is a stronger curvilinear (U-shaped) relationship between situational workplace anxiety and cognitive interference when EI is low.

Discussion

The TWA makes a significant contribution to the literature by elucidating the mechanisms and boundary conditions by which dispositional and situational workplace anxiety can debilitate and facilitate typical and episodic performance. It also specifies determinants of workplace anxiety at the dispositional and situational levels. Clearly, anxiety is more complex than how it has been modeled in the past. Considering both dispositional and situational workplace anxiety allows for a model that accounts for stable individual differences (dispositional workplace anxiety) as well as changing affective states (situational workplace anxiety), enabling consideration of both within-person situational fluctuations and between-person variability. As such, it has important practical implications for employees experiencing anxiety at work and can serve as a springboard for future research on workplace anxiety.

Theoretical Contributions

Our model makes a number of theoretical contributions. We advance a model of workplace anxiety that (a) focuses on both dispositional and situational workplace anxiety, (b) explicates both the facilitative and debilitating processes through which workplace anxiety has an influence on job performance, (c) outlines the precise boundary conditions through which workplace anxiety facilitates and debilitates job performance, (d) differentiates between episodic and typical job performance to align with the dispositional and situational workplace anxiety types, and (e) considers the antecedents of both dispositional and situational

workplace anxiety. Importantly, the TWA also extends existing stress theories. We discuss each of the contributions in turn.

First, we focus our model of workplace anxiety at the intersection of both the level of the person (i.e., dispositional workplace anxiety) and the situation (i.e., situational workplace anxiety). This renders the TWA the first theory to conceptualize a holistic picture of within-person and between-person variability in workplace anxiety. By introducing a model that integrates person and situational aspects of workplace anxiety, we lay the foundation for additional research on both dispositional and situational workplace anxiety. For example, some researchers are interested in examining how situation-based anxiety affects negotiations (Brooks & Schweitzer, 2011) or seeking and using advice (Gino, Brooks, & Schweitzer, 2012). Other researchers are interested in examining how dispositional anxiety affects job satisfaction (Judge, Heller, & Mount, 2002) or counterproductive work behaviors (Fox, Spector, & Miles, 2001). The TWA provides a framework to guide such research programs. By integrating both dispositional and state-based workplace anxiety, we enable consideration of within-person variability at the specific situation level as well as between-person variability across people. We note that while our model is partitioned into between- and within-person levels, researchers may test the two simultaneously. For example, researchers may use a daily experience sampling study to capture multiple instances of situational workplace anxiety over time, which would enable consideration of both within- and between-person workplace anxiety processes.

Second, our model is more comprehensive than past work that has focused primarily on direct effects between anxiety and performance. We advance research by explicitly describing the cognitive, motivational, and resource processes linking dispositional and situational levels of workplace anxiety to job performance. For dispositional workplace anxiety, drawing from resource theory (Hobfoll, 1989), we position emotional exhaustion as the mechanism through which dispositional anxiety debilitates performance. For situational workplace anxiety, drawing from cognitive processing theories (Sarason et al., 1986; Wine, 1980) and past theories of general anxiety (Eysenck et al., 2007), we position cognitive interference as the mechanism through which situational anxiety debilitates performance. We further draw from cognitive-motivational models (Carver et al., 2008; Kanfer & Ackerman, 1989) to position self-regulatory processing behaviors as mechanisms that guide dispositional and situational anxiety to facilitate job performance. The multiple pathways clarify the routes through which dispositional and situational workplace anxiety can have both a dark *and* a bright side. Consideration of a bright side of workplace anxiety is a novel contribution, as previous work on stress has not uncovered the potential for a bright side linking stress or anxiety-related constructs to job performance.

Third, our model specifies when dispositional and situational workplace anxiety can facilitate and debilitate job performance. We position motivation, ability, and EI as the main boundary conditions that guide anxious employees toward facilitative or debilitative performance. We draw from research on accomplishment striving (Barrick et al., 2002), cognitive intelligence (Spearman, 1904), technical skills (Latham & Seijts, 1998), and the ability to understand and use emotions (Mayer et al., 2008) as key factors that shape the performance outcomes of anxious employees. In doing so, our model is able to address questions that pertain

not only to how, but also to when workplace anxiety has a dark and bright side.

Fourth, we align dispositional workplace anxiety with typical performance that is carried out in more routine day-to-day performance over an extended period of time, and situational workplace anxiety with episodic performance that is carried out in situations that are relatively short in duration (Motowidlo et al., 1997; Sackett et al., 1988). We also align both types of anxiety with two self-regulation systems, such that dispositional workplace anxiety is linked with a higher-order and longer-term reflective system, and situational workplace anxiety is linked with a lower-order and shorter-term reflexive system (Carver et al., 2008).

Fifth, we outline the antecedents of both dispositional and situational workplace anxiety. We draw broadly from various literatures, such as clinical, stress, and educational psychology, to pinpoint the main factors that lead to dispositional and situational workplace anxiety. This includes an account of the main employee characteristics (gender, age, job tenure, core self-evaluation, and physical health) that impact dispositional workplace anxiety. Our model also advances core situational characteristics (emotional labor demands, task demands, and organizational demands) and job characteristics (job type, job demands, job autonomy) that impact situational workplace anxiety.

Finally, we advance existing models of stress. As discussed, anxiety is a strain symptom within the stress process (see Sonnentag & Frese, 2013). Our model is distinct from what has been covered in the stress literature, particularly with respect to research on strain resulting from job stress. First, the stress literature has placed a heavy emphasis on the antecedents of the stress process (e.g., Demerouti et al., 2001). When it comes to research on strain reactions, the stress literature has typically considered the health-related consequences of work stress (e.g., McEwen & Stellar, 1993; Ursin & Eriksen, 2004). Importantly, there is very limited work on anxiety, let alone work on anxiety and job performance. The TWA extends research by emphasizing the underlying explanatory mechanisms and boundary conditions of workplace anxiety on the one hand, and typical and episodic performance as a core outcome variable. The explicit focus on the work context provides the added advantage of extending theories of anxiety beyond testing, sports, music, and educational contexts.

In summary, our theoretical model unpacks the complex relationship underlying workplace anxiety and job performance and suggests that it is no longer informative to consider the relationship between anxiety and job performance without also considering the distinction between anxiety and performance types, as well as the antecedents, mechanisms and boundary conditions that guide anxious employees along each path. In other words, our framework models the core nomological network surrounding workplace anxiety and lays the foundation for a broad range of research questions.

Practical Implications

The TWA has notable implications for both employees and organizations, particularly those associated with stressful occupations, such as police officers, senior corporate executives, public relations executives, and airline pilots (CareerCast, 2017). In particular, the TWA suggests that employees experiencing momentary anxiety are more likely to exhibit low levels of performance to

the extent that cognitive interference processes dominate. This occurs to the greatest extent when anxiety is very high or very low (U-function). Chronically anxious employees are more likely to exhibit low levels of performance through emotional exhaustion. This occurs to the greatest extent when anxiety is high (linear function). On the bright side, the TWA also suggests that dispositional and situation-specific anxious employees are likely to exhibit high levels of performance to the extent that they engage in self-regulatory processing behaviors. This occurs to the greatest extent at moderate levels of anxiety (inverted-U function). Thus, our model points to practical considerations for managing anxiety. The key lies in being cognizant of how to leverage one's own anxiety or how to guide employees' anxiety toward effective performance.

In that regard, the TWA identifies motivation, ability, and EI as fundamental to guiding workplace anxiety toward a facilitative path. Motivation, as outlined in the TWA, gives anxious individuals impetus toward engaging in self-regulatory processing behaviors required to boost performance. From this perspective, it is critical that anxious employees find the intrinsic motivation that drives the joy in their work, consistent with decades of research on person-organization fit (Kristof-Brown, Zimmerman, & Johnson, 2005). From a managerial perspective, managers need to recognize that employees are motivated by different needs (Gagné & Deci, 2005) at different times and are also likely to be at different stages of self-actualization (Maslow, 1970). It is thus essential for managers to acknowledge the different needs of their workforce, particularly those who are prone toward anxiety and employees who are experiencing heightened situational anxiety. Thus, the TWA has important practical relevance for personnel selection practices, promotion contexts, goal-setting initiatives, and work-life integration programs.

Ability is another critical variable identified in our model that carries important practical relevance for organizations and employees. In this regard, both cognitive ability and training are significant. Anxious employees are encouraged to be proactive in their learning and continuing education. Learning a new technique for accomplishing a task or taking professional development courses are investments in one's career that should help reduce worries and raise anxious individuals' confidence on the job. This is in line with research on career self-management, which encourages employees to take an active role in managing their careers (Kossek, Roberts, Fisher, & DeMarr, 1998). Career self-management emphasizes developmental feedback seeking, advice seeking, and career problem-solving. With regard to on-the-job training, providing employees with technical know-how should play an important role in helping anxious individuals minimize self-doubts and foster self-regulatory processing needed for performance. Thus, the TWA also has important practical relevance for selection and promotion contexts, as well as leadership development training.

Finally, EI can help minimize chronically anxious employees' experience of emotional exhaustion, minimize cognitive interference for situation-based anxious employees, and maximize self-regulatory processing behaviors for both chronic and situation-based anxious employees. This is critical, as emotional exhaustion has been linked to many negative outcomes in the workplace, including lower performance and citizenship behaviors (Cropanzano, Rupp, & Byrne, 2003). Fortunately, EI has been positioned as an ability that has the potential to be learned (for a review, see

Côté, 2014). EI training for managers has been popular in organizations, such as Google, since this construct gained popularity in the 1990s and early 2000s (Giang, 2015). Organizations should consider providing similar EI training to anxious employees, as these individuals are likely to reap the benefits in recuperating resources often spent worrying about work outcomes.

Future Research Directions

The TWA offers 19 research propositions and thus provides numerous avenues for future research. It also illustrates that empirical consideration of the relationship between workplace anxiety and job performance would benefit from advanced designs. An appropriate starting point would be longitudinal field studies wherein antecedents of workplace anxiety are assessed through measures of employee, job, and environmental characteristics. As a second step, dispositional workplace anxiety could be measured using validated instruments, such as the Workplace Anxiety Scale (McCarthy et al., 2016). Situational workplace anxiety can be induced and measured using physiological measures of heart rate or skin conductance, or using a modified Workplace Anxiety Scale to suit situation-specific contexts. Assessment of the mechanisms could be conducted at a third point in time, using well-validated instruments. At a final timepoint, third-party ratings (i.e., supervisor and coworker ratings) of episodic and typical job performance could be obtained. It would also be useful to consider performance at multiple time points, such that, for example, performance failure might feed back into emotional exhaustion, which further inhibits performance.

To conduct a test of the boundary conditions through which workplace anxiety debilitates and facilitates performance, controlled field experiments are recommended. In these experiments, researchers can manipulate motivation through cognitive primes (Desselles & Apter, 2013) or goal-setting exercises (Locke & Latham, 1990), which can establish whether motivation serves as a critical moderator guiding when workplace anxiety will be more likely to lead to self-regulatory processing and less likely to lead to cognitive interference and emotional exhaustion. Ability could be manipulated through conditions that provide varying levels of training, or assessed through cognitive ability measures. Finally, EI could be assessed through measures widely used in the literature, such as the Situational Test of Emotional Understanding and the Situational Test of Emotional Management (MacCann & Roberts, 2008).

Given that the TWA predicts curvilinear relationships, as well as moderation of such relationships, it is important that researchers test curvilinear models of workplace anxiety, so as not to undermine the complexity of the relationships underlying workplace anxiety and job performance. In terms of methodological alignment and statistical modeling for curvilinear effects, researchers must select and develop measures that capture the full range of anxiety. It is also essential to focus on industries that capture the full range of workplace anxiety, including high (public relations executives, airline pilots) and low (sonographer, hairstylist; Career-Cast, 2017) anxiety industries. In terms of statistical modeling, each of the TWA's propositions can be tested with regression-based analyses that model linear and quadratic effects. As Lam, Huang, and Chan (2015) illustrated, the magnitude of these effects can be determined through beta weights, and thresholds can be

plotted graphically. Ideal-point models may be another useful tool to uncover curvilinear relations (Carter et al., 2014). Researchers can also test the TWA with structural equation modeling using advanced statistical software.

There are also some avenues for future research that are not explicitly identified in our model. Researchers, for example, could consider more nuanced associations between EI and workplace anxiety. Given that EI comprises a number of dimensions (perceiving, understanding, using, and managing emotions), it would be advantageous to examine whether they exhibit unique relations with workplace anxiety and the proposed mechanisms. Future research could also consider unique moderators of the antecedents of dispositional and situational workplace anxiety. For example, organizational and family support might buffer the effect of employee health on experiencing chronic levels of workplace anxiety. It would also be useful for future research to consider the direct impact of motivation, ability, and EI on workplace anxiety.

Another valuable area for future research is the examination of different forms of situational workplace anxiety, such as social anxiety. Social anxiety refers to feelings of nervousness about how one is being perceived and/or evaluated in social situations (cf., Schlenker & Leary, 1982). Social anxiety is particularly important in the corporate realm, as many jobs entail a large interpersonal component. Jobs in sales and marketing, law, and health care, for example, require constant interaction and effective social skills. Occupations requiring high levels of social skills are projected to have the fastest growth over the next decade (Bureau of Labor Statistics, 2015). Thus, developing a better theoretical and empirical understanding of the role of social anxiety at work is important for both employees and organizations. Although our theory of workplace anxiety may help guide such research, the broader literature on social anxiety, communication apprehension, and shyness (e.g., Beatty, McCroskey, & Heisel, 1998; Cheek & Buss, 1981) is also likely to be valuable.

Given the widespread use of work groups in organizations, another important direction for future research would be to consider a group level of anxiety. In such work groups, individual employees may transfer their feelings of anxiety to other group members through emotional contagion (Hatfield, Cacioppo, & Rapson, 1992). At the group level, we would expect that group workplace anxiety carries parallel processes to the individual level, with complementary positive and negative effects on group performance. We conjecture that group-level anxiety would debilitate group performance through group information processing deficiencies (Driskell, Salas, & Johnston, 1999) and group exhaustion (Kozusznik, Rodríguez, & Peiró, 2015), whereas group-level anxiety would facilitate group performance through group regulatory mechanisms (Kozlowski & Ilgen, 2006).

Conclusion

Decades ago, W. H. Auden's (1947, p. 1) poem proclaimed that it was "The age of anxiety." Today, more than ever, the experience of anxiety is prominent in the workplace and carries significant consequences for employees and organizations. The theoretical framework developed in this article clarifies past inconsistent findings by outlining a multilevel, multiprocess model of dispositional and situational workplace anxiety and its effects on typical and episodic performance. We hope that the TWA will provide the

foundation for future research on workplace anxiety and its complex relationship with job performance.

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