

The upside to feeling worse than average: A conceptual framework to understand when, how, and for whom worse-than- average beliefs have long-term benefits

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Abstract: Our thoughts, feelings, and behaviors are shaped in critical ways by our beliefs about how we compare to other people. Past research has predominantly focused on the consequences of believing oneself to be better than average (BTA). Research on the consequences of worse-than-average (WTA) beliefs has been far more limited and has focused mostly on the downsides of WTA beliefs. In this paper, we argue for the systematic investigation of the possible long-term *benefits* of WTA beliefs in domains including motivation, task performance, and subjective well-being. We develop a conceptual framework for examining these potential benefits, explore the utility of this framework to generate novel insights in an example psychological domain (skill learning), and conclude with broader recommendations for research in other domains, including friendship formation and moral and political decision making.

Keywords: worse than average, better than average, social cognition, self-perception, social comparisons

On the day before your annual performance review, you might have one of two thoughts: you might think that you are (1) *less* skilled than your fellow colleagues, or you might think that you are (2) *more* skilled than your fellow colleagues. If you are like most people, your thoughts will likely align with the latter option—confidently believing that you are more skilled than your peers. Indeed, most people believe that they are “better than average” (BTA): more intelligent, interesting, and attractive than other people (Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995). As it turns out, BTA beliefs are linked to short-term psychological benefits such as positive mood and enhanced self-esteem (Aspinwall & Taylor, 1993). However, what if you believed that you were less skilled than your peers? You might initially feel bad about yourself, but could there also be hidden upsides to feeling “worse than average” (WTA)—such as superior skill learning and long-term professional advancement?

Prior research has predominantly focused on the positive consequences of BTA beliefs for motivation, task performance, and subjective well-being (Robins & Beer, 2001; Taylor & Brown, 1988; Wills, 1981). In contrast, WTA beliefs are generally considered unhelpful. However, potential positive consequences of WTA beliefs may have been overlooked, in part because WTA beliefs stand in stark opposition to strong cultural ideals in North America. The current zeitgeist in North American culture promotes self-enhancement and high self-regard (Twenge & Campbell, 2001, 2010), and scientists are not exempt from culturally-biased thinking (Henrich, Heine, & Norenzayan, 2010). In fact, researchers have made omissions about other less culturally desirable traits. The benefits of introversion and solitude are only now being systematically documented after delayed investigation (Grant, 2013; Kahnweiler, 2009; Long & Averill, 2003), and there is a recent upsurge of research examining the benefits of negative affective experiences such as depressed mood (Andrews & Thomson, 2009; Kashdan & Biswas-

Diener, 2014) and, conversely, the downsides of positive affective experiences such as happiness (Gruber, Mauss, & Tamir, 2011; Mauss et al., 2012).

We propose that a systematic attempt to document the benefits of WTA beliefs is long overdue; thus, our overarching aim is to encourage more research on this potentially rich topic in social cognition. To this end, the current paper develops a conceptual framework to predict when and for whom WTA beliefs are likely to have positive downstream consequences for motivation, task performance, and subjective well-being. In contrast to previous theoretical models, which have focused primarily on the causes (Chambers & Windschitl, 2004; Guenther & Alicke, 2010; Moore & Small, 2007; Windschitl, Conybeare, & Krizan, 2008) or the immediate consequences of social comparison processes (Aspinwall & Taylor, 1993; Tesser, Millar, & Moore, 1988), our conceptual framework maps out a sequence of affective and cognitive events that we hypothesize allows the benefits of WTA beliefs to accrue over time. In addition, we specify how individual differences influence the progression of this sequence. To demonstrate the relevance of this framework, we apply it to the example domain of skill learning, which is a critical determinant of task performance as well as of subjective well-being (Diener & Seligman, 2002; Reis, McGuire, & Neu, 2000). To conclude, we speculate about the usefulness of this framework for other psychological domains ranging from friendship formation to moral and political psychology.

WTA/BTA beliefs in relation to other self-evaluations

BTA beliefs occur when people think that their standing on some dimension (e.g., a skill, a trait, or their chance of success) is superior to that of the average person or peer. In contrast, WTA beliefs occur when people think that their standing on some dimension is inferior to that of the average person or peer. WTA and BTA beliefs are conceptually related to underconfidence and overconfidence (e.g., when people are unrealistically pessimistic/optimistic about their

chances of experiencing positive events; (Weinstein, 1980), as well as to self-effacement and self-enhancement (e.g., when people demonstrate a preference to hold unrealistically negative/positive beliefs about themselves; (Brown, 1986; Colvin & Block, 1994; Taylor & Brown, 1988, 1994). Given that there is limited research exploring the long-term consequences of BTA and WTA beliefs, we will also review research that is relevant to these related constructs. However, we see two important distinctions between WTA beliefs and underconfidence/self-effacement. First, unlike underconfidence and self-effacement, which are predicated on beliefs about the self (believing that you are or are not performing according to your own standards or believing that you are or are not likely to experience certain events), WTA beliefs involve a salient social comparison (believing that you are worse than or better than the average person or peer). Thus, we propose that WTA beliefs are particularly likely to trigger *socially-oriented* affective, cognitive, and behavioral outcomes. Specifically, we propose that WTA beliefs are likely to lead to psychological and behavioral outcomes that rely on seeking out relevant social models or social feedback (Seta, 1982). Second, we propose that the feeling of not performing as well as one's peers—as opposed to simply feeling dissatisfied with one's performance or abilities—is uniquely motivating (Shore & Tashchian, 2002). We will further expand and contextualize these arguments in the conceptual framework detailed below.

Immediate Consequences of BTA and WTA Beliefs

BTA beliefs are very common: research suggests that individuals typically see themselves as better than their peers on a diverse spectrum of personal characteristics ranging from physical attractiveness to leadership abilities (Taylor & Armor, 1996). Research also suggests that the immediate consequences of BTA beliefs include boosts in momentary affect and subjective well-being (Aspinwall & Taylor, 1993; Gibbons & Gerrard, 1989; Lyubomirsky

& Ross, 1997; Major, Sciacchitano, & Crocker, 1993; Testa & Major, 1990) as well as gains in task performance (Ehrlinger & Dunning, 2003; Tesser et al., 1988). WTA beliefs, on the other hand, have been linked to negative momentary affect and decrements to subsequent task performance. For example, participants who received feedback that they had performed worse than one of their peers on a personally-relevant task experienced more arousal and negative affect as compared to participants who received feedback that they had performed better or the same as one of their peers. In turn, these negative affective responses predicted poorer performance on subsequent lab tasks, due to behaviors such as speeding up while completing tasks that required focus and careful attention (Tesser et al., 1988).

In another set of studies, students who believed that they were unskilled at a task also believed that they were taking more time to answer questions and were expending more effort on the task, as compared to students who believed that they were skilled at the domain in question, regardless of their actual performance (Critcher & Dunning, 2009). Skill-based misperceptions have negative consequences for task performance in the moment: for example, negative skill-based misperceptions are associated with reduced performance on spatial, numerical, and verbal tasks (Paunonen & Hong, 2010), reduced public speaking abilities (Gilovich & Savitsky, 1999), and worse performance on novel tasks in the lab (Paunonen & Hong, 2010; Zunick, Fazio, & Vasey, 2015). Overall, it seems that when people are put “on the spot” to perform in a domain where they feel WTA, their performance suffers. Furthermore, in a cross-sectional study, people who overestimated the extent to which their peers experienced positive emotions, in comparison to themselves, reported lower subjective well-being, greater rumination, and more depressive symptoms (Jordan et al., 2011). Together, these findings provide evidence that WTA beliefs

have negative consequences for momentary affect, immediate task performance, and subjective well-being.

However, the reliance on cross-sectional designs and lab-based tasks to draw conclusions about the effects of BTA and WTA-related beliefs may be short-sighted. We suggest that longitudinal designs may reveal a markedly different picture of how these beliefs impact thoughts, feelings and behaviors over a different time scale than has typically been considered in the existing literature.

Consequences of BTA and WTA Beliefs over Time

Why might the relative balance of benefits and drawbacks of BTA and WTA beliefs change over time? First, researchers have speculated that self-enhancement related beliefs result in reduced motivation and efforts to improve (Brown, 2012; Moore & Healy, 2008; Vanypere, 1992). Cross-sectional data provides evidence that when students are surrounded by other students with lower academic abilities, they experience greater academic self-esteem, yet show worse academic achievement as compared to students who are surrounded by others with higher academic abilities (Altermatt & Pomerantz, 2005; Felson & Reed, 1986; Marsh & Parker, 1984).

Second, researchers have speculated that holding overly positive beliefs about one's abilities can lead to unrealistic expectations and can have detrimental consequences for performance by increasing the likelihood of experiencing frustration and burn-out (Dale & Weinberg, 1990; Polivy & Herman, 2000; Twenge, 2009). In a qualitative study of teachers recruited from workshops in the United States and Israel, teachers who reported a greater discrepancy between idealized expectations of their own performance and their actual performance reported greater burn-out and less satisfaction with their jobs (Friedman, 2000). Building from this cross-sectional evidence, we propose that the benefits of WTA beliefs have

been overlooked in part because they unfold over time rather than occurring immediately. This proposition is consistent with well-documented sleeper effects that appear across numerous domains such as those found as related to clinical treatments for alcoholism (White, Mun, Pugh, & Morgan, 2007) and schizophrenia (Moritz et al., 2014) whereby the treatments that are difficult for patients in the short-term can often yield the greatest long-term benefits.

Although direct evidence documenting the longer-term consequences of BTA and WTA beliefs is limited, related research has focused on the longer-term consequences of self-enhancement and overconfidence in the domains of academics, well-being, and social activities. The findings of these studies suggest that the pattern of short-term benefits of BTA beliefs may come at a long-term cost. In one of the few longitudinal studies in this area, college students who initially overestimated their abilities (both in comparison to the abilities of their peers and their actual abilities) reported feeling more disengaged and had lower self-esteem and subjective well-being four years later; students who did not initially overestimate their academic abilities did not show this pattern of decline (Robins & Beer, 2001). In another longitudinal study, students entering college with overly high expectations about their academic achievement reported greater self-esteem at baseline, yet showed decreases in self-esteem during their four-year college degrees, even after controlling for the grades they received (Chung et al., 2014). The authors of this study proposed that overly high expectations might have detrimental consequences over time because people cannot live up to their own expectations, thus providing evidence that having overly positive beliefs can be a “mixed blessing” (Chung et al., 2014).

Other research has documented detrimental effects of BTA-related beliefs for subjective well-being, physical health, and social relationships. Individuals who scored higher on self-enhancement measures reported greater positive affect and resilience up to several months after

being personally involved in a traumatic event (September 11th); however, these individuals were also rated by friends and relatives as less socially adjusted eighteen months later, suggesting that self-enhancement may have decreased psychological functioning over time (Bonanno, Rennie, & Dekel, 2005). Among college students, people who were unrealistically optimistic about how alcohol consumption would impact their lives (i.e., students who reported that would have fewer problems with alcohol use as compared to their peers) showed increases in negative alcohol-related incidents over a 2-year period (Dillard, Midboe, & Klein, 2009).

In the social domain, people who overestimate how popular and well-liked they are (as compared to how popular their peers rate them) *are* initially liked better by their peers, yet, over time, self-effacers are liked more by others (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Morf & Rhodewalt, 2001; Paulhus, 1998). In a study of group interactions, students who initially engaged in more status self-enhancement during face-to-face interactions were liked less over the course of four separate interactions as compared to students who were either initially accurate about their status or who were self-effacing; furthermore, in a follow-up study, groups with a higher number of status self-enhancers experienced more conflict during an in-lab task (Anderson et al., 2006). Research suggests that individuals holding overly positive beliefs about themselves (as compared to ratings made by trained examiners and peers) are liked less by others over time (Colvin, Block, & Funder, 1995), go on to receive lower scores on annual performance reviews (Lönqvist, Leikas, Verkasalo, & Paunonen, 2008), and experience decreased satisfaction over the course of their romantic relationships (McNulty, O'Mara, & Karney, 2008) and when making the transition to parenthood (Ungerer, Waters, Barnett, & Dolby, 1997).

In summary, a number of studies suggest that BTA-related beliefs can incur long-term psychological costs. In doing so, this work points to the question of whether WTA beliefs might

also incur long-term psychological benefits. However, research exploring this question is significantly lacking. Much remains unknown about the time frame and the sequence of affective and cognitive events through which WTA beliefs reliably promote positive psychological outcomes. Thus, to guide future research in this area, we propose a conceptual framework that generates predictions about exactly when, how, and for whom WTA beliefs might have long-term benefits for motivation, task-performance, and subjective well-being.

Conceptual Framework

We propose that under certain conditions, WTA beliefs trigger a specific and temporally-predictable sequence of affective, motivational and behavioral changes events that can promote successful long-term behavioral change (Figure 1). In particular, we propose that WTA beliefs produce long-term positive consequences when they lead to feelings of threat, enhance attention towards appropriate social models, encourage social approach, facilitate social feedback, and lead to improved motivation and task performance.

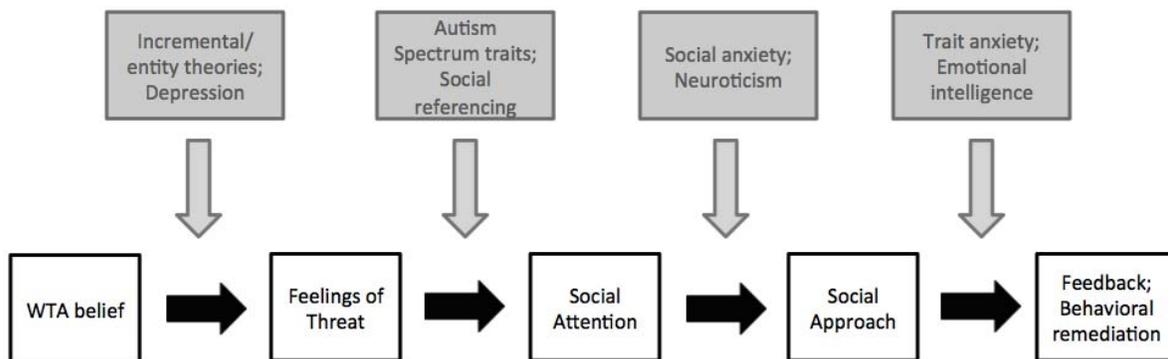


Figure 1. Conceptual framework for a sequence of events that leads to long-term benefits of WTA beliefs. White boxes represent the sequence. Grey boxes represent individual difference factors that can influence how effectively progress is made between steps of the sequence.

Feelings of threat. Consistent with past theorizing (Roese & Olson, 2007), we posit that there are two initial and necessary conditions for WTA beliefs to yield benefits over time: (1) an

individual must feel threatened by and motivated to reduce his or her WTA belief and (2) an individual must feel that his or her own standing in the situation is subject to change. Stated differently, successful “behavioral remediation”—actions taken by people toward improving their situations—depends on them choosing to reduce the discrepancy between themselves and others and believing that they can (Roese & Olson, 2007). WTA beliefs signal that one’s performance is not adequate and are generally perceived as threatening (Taylor & Brown, 1988). In turn, feelings of threat are aversive (Greenwald, 1980; Steele, 1988; Tesser et al., 1988; Wilson, Gilbert, & Centerbar, 2003), and encourage people to change their behavior (Heine, Proulx, & Vohs, 2006; Roese & Olson, 2007; Solomon, Greenberg, & Pyszczynski, 1991).

We propose that WTA beliefs may uniquely motivate behavioral remediation (above and beyond negative feelings about oneself) because of a desire to feel *at least* average as compared to one’s peers. In other words, people may be more likely to pursue behavioral remediation to get from the 48th to 50th percentile, than they would be to get from the 51st to 53rd percentile, on their performance. This proposition is consistent with pioneering theoretical work on social comparison processes (Festinger, 1954). This work proposes that in situations where individuals are led to compare themselves to other people, individuals will be driven to reduce the discrepancy between themselves and others, beyond more general attempts to simply feel better about their own performance (Hypothesis 1, pg. 118). Consistent with this notion, people experience the greatest motivation to improve performance after receiving feedback that they are performing worse than average as compared to receiving either positive or negative feedback about their performance in the absence of normative information (Shore & Tashchian, 2002).

Social attention. In the context of WTA beliefs, feelings of threat that arise from inadequate performance are specifically related to how a person is performing in comparison to

his or her peer group. Consequently, when feelings of threat are combined with WTA beliefs, a unique situation arises wherein other people are both *the cause of* (via negative social comparisons), and *a potential solution to* (as potential models), an individual's negative affective state. Therefore, we hypothesize that feelings of threat that arise from WTA beliefs are unique (relative to related beliefs such as underconfidence and self-effacement) in their tendency to motivate individuals to focus on others in their social environment.

This step of the conceptual framework posits that successful behavioral remediation following feelings of threat hinges on an individual's attention being selectively refocused on social models. While a general negative evaluation of oneself or one's own standing (e.g., underconfidence, self-effacement) could lead to successful behavioral remediation through other non-social methods, we propose that WTA beliefs are unique in terms of their tendency to motivate people to seek out relevant *social* models¹. Here, our theorizing is consistent with research suggesting that people are more likely to evaluate their abilities and opinions by comparing their own performance with the abilities and opinions of others, in the absence of objective performance standards (Festinger, 1954). Indeed, when individuals feel like they are not living up to social standards, they become more motivated to compare themselves with others to learn how to modify their behavior (Gibbons & Buunk, 1999). For example, research suggests that when people feel uncertain about their performance in a personally relevant domain, they spend more time comparing themselves to others (Butzer & Kuiper, 2006), such as by spending more time comparing themselves to other people on Facebook (Lee, 2014).

¹ We are not proposing that seeking out relevant social models is the only way to improve performance, or that a WTA belief precludes the use of a non-social method of improvement, such as reading a self-help book and/or spending time alone practicing a novel skill. Instead, we are proposing that in the case of feeling WTA, engaging in *socially*-oriented affective, cognitive, and behavioral changes might be the most successful route to potentiate long-term benefits.

However, for social approach behavior to have adaptive consequences, the social model that is sought out must be appropriate for improving one's own capacities in a specific domain. Empirical evidence suggests that most people are quite effective at seeking out relevant social models to promote learning. Children who are as young as five years old seek out accurate (as opposed to simply confident) models in new domains (Brosseau-Liard, Cassels, & Birch, 2014). This ability to seek out relevant and appropriate social models has likely evolved over the course of human development to facilitate skill learning (Banaji & Gelman, 2013; Boyd, Richerson, & Henrich, 2011; Chudek, Heller, Birch, & Henrich, 2012). Consequently, to the extent that WTA beliefs lead to feelings of threat and heightened social attention, people are likely to seek out relevant social models to learn from and to reduce their WTA beliefs.

Social approach. Next, our conceptual framework posits that for the majority of individuals, enhanced attentional focus on other people that results from WTA-belief-induced feelings of threat should lead to social approach behavior. Consistent with this possibility, among psychologically healthy individuals, social threat (such as negative social evaluation or perceived social rejection) increases social approach motivation (DeWall, Maner, & Rouby, 2009; Maner, DeWall, Baumeister, & Schaller, 2007), prosocial decision-making (Dawans, Fischbacher, Kirschbaum, Fehr, & Heinrichs, 2012), and feelings of closeness with strangers (Berger, Heinrichs, von Dawans, Way, & Chen, 2016). The negative affect that is generated by social threat also leads people to seek out the advice of others (de Hooge, Verlegh, & Tzioti, 2014; Gino, Brooks, & Schweitzer, 2012). For example, across six experimental studies, individuals who were led to feel anxious were more likely to seek out and to take advice that was provided to them (Gino et al., 2012). We propose that WTA beliefs promote positive long-term behavior

changes when people increase their attention to social models, *as well as* when people actively approach more knowledgeable and skilled others as a means of dealing with feelings of threat.

Feedback. Finally, for the benefits of WTA beliefs to accrue over time, individuals need to continuously monitor and modify their behavior in response to social feedback. This proposition is consistent with research suggesting that goal achievement is a dynamic process (Van Yperen & Renkema, 2008). Within our proposed framework, WTA beliefs should dissipate over time as one's actual or perceived performance improves, and reappear when one's performance declines (Carver, 2006; Carver, Blaney, & Scheier, 1979; Carver & Scheier, 1982; Sedikides & Hepper, 2009). Consequently, several iterations of this hypothesized sequence of events—in which WTA beliefs trigger feelings of threat, enhance social attention, and promote social approach and social feedback, may need to occur before the maximal benefits of WTA beliefs are realized. The time course over which the benefits of WTA beliefs unfold will vary depending on domain-specific factors, such as how long it takes to learn a skill as well as the level of proficiency an individual hopes to achieve in the context of his or her behavioral remediation (Carver, 1978). This dynamism speaks to the critical importance of documenting the long-term consequences of WTA beliefs.

Individual Differences

Thus far, our model has provided an overview of a specific sequence of events through which WTA beliefs should lead to positive consequences: namely, when people feel threatened, turn to social stimuli, learn from relevant social models, and update their behavior in response to social feedback. Yet, our framework also posits that WTA beliefs are not uniformly beneficial; we predict that individual differences influence who will engage in the affective processes, cognitions and behaviors that promote the positive long-term consequences of WTA beliefs.

Although the following list is not intended to be exhaustive with respect to all possible individual differences that may be relevant to our conceptual framework, the overarching idea is that specific individual differences will affect people's reactions at each junction of the model, thereby determining whether and how the benefits of WTA beliefs accrue over time (Figure 1).

Feelings of threat: The role of entity/incremental theories and depression. Individual differences related to how people respond to threatening situations likely play a crucial role in predicting the long-term benefits of WTA beliefs. First, individual differences exist in the extent to which people believe that various personal characteristics, from intelligence to athletic prowess, are (1) fixed and trait-like (entity theory) or (2) malleable and changeable via effort and hard work (incremental theory; (Dweck, 2000, 2006). These beliefs have implications for how people respond to feedback about their own performance. A person who believes that her poor performance in a specific domain is an indication that she is WTA on an immutable trait may feel helpless to change the situation (in a manner reminiscent of learned helplessness; (Abramson, Seligman, & Teasdale, 1978; Seligman, 1972). She may be so discouraged by a WTA belief as to become unable to transform the associated feelings of threat into motivation to take remedial action. In contrast, people who believe that their personal characteristics are malleable are more likely to attribute their negative performance to effort, and in turn, are more likely to take remedial action (Dweck, 2006; Hong, Chiu, Dweck, Lin, & Wan, 1999). Thus, entity and incremental beliefs likely play a key moderating role in predicting whether people are able to move beyond feelings of threat to the subsequent steps in the sequence that are necessary for successful behavioral change.

Similarly, depression is associated with rumination and the tendency to perceive a lack of control over one's own outcomes (Brown & Siegel, 1988; Garber, Miller, & Seaman, 1979;

Marsh & Weary, 1989). Consequently, people with depressive symptomology who experience feelings of threat may entirely avoid the domain in which they feel WTA rather than turn their attention towards relevant social models that could otherwise help to improve their performance (Abramson et al., 1978; Holahan & Moos, 1987; Maier & Seligman, 1976; Peterson, Maier, & Seligman, 1993).

Social attention: The role of Autism Spectrum traits and social referencing. The next critical junction that links WTA beliefs to long-term benefits is an individual's ability to attend to relevant social stimuli. Research on Autism Spectrum Disorder and social referencing suggests that people differ in the extent to which they attend to relevant social stimuli, particularly in the context of a perceived threat.

Autism Spectrum Disorder (ASD) is a developmental condition affecting 1-2% of children in the United States (Centre for Disease Control and Prevention, 2015). ASD is characterized by difficulty with social communication and functional impairments in social relationships (American Psychiatric Association, 2003); children with ASD often show reduced attention to faces and people as well as impairments in social orienting and joint attention (Chawarska, Klin, & Volkmar, 2010; Dawson et al., 2004; Maestro et al., 2002). Empirical data conducted with non-clinical samples supports the theory that the core underlying characteristics underlying ASD exist on a continuous dimension rather than constituting distinct categories (i.e., of people who either do or do not "have" ASD; (Austin, 2005; Baron-Cohen, Wheelwright, Skinner, Martin, & Clubley, 2001; Chen & Yoon, 2011). Cross-cultural data further supports the idea of a "broader autism phenotype" in the general population (Wakabayashi, Baron-Cohen, Wheelwright, & Tojo, 2006), and evidence suggests that the traits associated with such a phenotype are normally distributed (Hurst, Mitchell, Kimbrel, Kwapil, & Nelson-Gray, 2007).

Thus, some people exhibit less spontaneous social attention and less interest in social interaction than others. We expect that these people are less likely to engage in the types of behaviors that we have proposed are necessary for the positive benefits of WTA beliefs to accrue.

Social referencing refers to the tendency of a person to look to another person in ambiguous situations to obtain clarifying information. Social referencing behavior appears as early as the first year of life—10-13 month-old infants encountering loud (i.e., potentially exciting but also potentially frightening) mechanical toys will check their caregivers' facial expressions before touching the toy (Tedra Walden & Ogan, 1988). Social referencing is an early-developing component of a set of competencies (which also includes theory of mind, the ability to recognize when information is needed and from whom to seek it, and the ability to signal that information is wanted) that is necessary for developing expertise in social information gathering (Baldwin & Moses, 1996). Individual differences have been observed in social referencing behavior (Dickstein, Thompson, Estes, Malkin, & Lamb, 1984; Walden, Knieps, & Baxter, 1991) as well as in related competencies including theory of mind (Carlson & Moses, 2001; Cutting & Dunn, 1999) and social signaling (Walden, Blackford, & Carpenter, 1997). Such individual differences—by influencing whether an individual will turn his or her attention to social stimuli in an ambiguous or threatening situation—could lead to downstream consequences for the ability of an individual to profit from WTA beliefs.

Social approach: The role of social anxiety and neuroticism. Another critical component of our conceptual framework that links WTA beliefs to long-term benefits is people's willingness to approach others after experiencing a threatening WTA belief. Individual differences in social anxiety and neuroticism, both of which influence the tendency to engage in

social approach versus social avoidance when experiencing feelings of threat, likely play a critical role in predicting successful behavioral remediation following a WTA belief.

Social anxiety, which is estimated to affect approximately 7% of the adult population at any given time (Kessler, Chiu, Demler, Walters, 2005), is characterized by a persistent tendency to avoid social situations involving unfamiliar people or possible scrutiny by others (American Psychiatric Association, 2003). In addition to influencing a person's chronic or baseline tendency to engage in social approach behavior, social anxiety's effects seem to be exacerbated by stress. The contrast between non-anxious and socially anxious individuals is particularly telling. Non-anxious individuals show *reduced* attention to threatening stimuli (such as angry faces) after experiencing acute social stress (Chen, Schmitz, Domes, Tuschen-Caffier, & Heinrichs, 2014); this has been theorized to be an adaptive response that promotes social engagement, social support seeking, and the formation of closer social bonds (Berger, Heinrichs, von Dawans, Way, & Chen, 2016). In contrast, people with social anxiety disorder react to acute social stress with *heightened* sensitivity to angry faces and greater social avoidance behavior (Roelofs et al., 2009). These findings suggest that social anxiety might play a critical role in whether an individual engages in social approach (such as seeking feedback) following a threatening WTA belief.

The personality trait of neuroticism, which is sometimes called emotional instability, is characterized by the tendency to experience negative emotions such as anger, anxiety, and sadness (Costa & MacCrae, 1992). Neuroticism has also been linked to poor stress coping and the choice of ineffective coping strategies that can in fact exacerbate stressful situations (DeLongis & Holtzman, 2005). Furthermore, individuals higher in neuroticism have been found to react to a broad range of stressors with lower levels of problem solving and higher levels of confrontation, escape avoidance, and self-blame, as well as higher levels of interpersonal

withdrawal (Lee-Baggley, Preece, & DeLongis, 2005; O'Brien & DeLongis, 1996). In sum, social anxiety and neuroticism may both be particularly perverse because these traits lead people to withdraw socially and avoid seeking social support at precisely the moments at which such strategies could be the most helpful—such as in the context of a threatening WTA belief.

Feedback: The role of trait anxiety and emotional intelligence. The final step in our conceptual framework linking WTA beliefs to positive long-term changes is the use of social feedback to guide behavioral change. Across many domains, people regulate their performance by monitoring how well they are doing: if they fall short of their desired standard, they change their behavior to try to meet the standard, followed by self-monitoring, in a feedback loop that continues until they are satisfied with their performance (Carver & Scheier, 1982, 2000). Trait levels of anxiety may play a critical role at this junction, as research suggests that people are willing to accept both the reasonable and unreasonable advice that they are presented with, after being led to feel anxious (Gino et al., 2012). People who are prone to experiencing anxiety across various situations might benefit less from WTA beliefs because they are less able to distinguish between feedback that is or is not likely to lead to successful behavioral remediation.

Emotional intelligence may also affect a person's ability to benefit from WTA beliefs. People who score higher on measures of emotional intelligence are better able to predict how they will react to future situations and to regulate their emotional experiences to promote goal attainment (Brackett, Rivers, & Salovey, 2011; Dunn, Brackett, Ashton-James, Schneiderman, & Salovey, 2007; Mayer, Roberts, & Barsade, 2008; Mayer & Salovey, 2007). Consequently, emotional intelligence may help people effectively regulate their feelings of threat that initially coincide with WTA beliefs, and to skillfully use WTA beliefs to motivate adaptive and approach-oriented future actions. More generally, the example of emotional intelligence

highlights the possibility that some of the individual differences that we have discussed may have effects at more than one of the critical junctions linking WTA beliefs to long-term benefits. For example, people who score lower on emotional intelligence often have poorer social skills (Frederickson, Petrides, & Simmonds, 2012). Thus, people who score lower on measures of emotional intelligence might also be less willing or able to seek out the advice of relevant social models, if they are less able to recognize that their WTA belief could be remedied by reaching out to a peer, or if they are less able to identify an appropriate social model to solicit feedback.

The role of cultural context. The proposed sequence of events, and the role of individual differences in linking WTA beliefs to long-term benefits, is also likely to be influenced by the cultural context in which these WTA beliefs arise. Culture can influence whether and how individuals initially experience WTA beliefs. In East Asian cultures, self-effacing biases are more common and self-enhancing biases are less common than in Western cultures (Heine & Ruby, 2010). Because WTA beliefs are also more likely to be the norm in collectivist cultural contexts (Heine & Hamamura, 2007; Mezulis, Abramson, Hyde, & Hankin, 2004), WTA beliefs might be less likely to trigger feelings of threat in these contexts.

As a result, the exact sequence of events proposed in our conceptual framework may vary across cultures. Individuals in an East Asian context may move directly from a WTA belief to social attention or social approach without experiencing feelings of threat. Overall, East Asians might be less likely to be motivated to feel BTA. Indeed, East Asian individuals are less likely to self-enhance on explicit measures as compared to Asian Americans and Westerners (Heine & Hamamura, 2007), suggesting that East Asians are not socially motivated to achieve BTA outcomes. People from collectivist cultures might be more comfortable with their WTA beliefs, and experience reduced motivated to improve their performance. More broadly, when

individuals are satisfied with a WTA belief (e.g., when a novice is aware that he is below the average skill of his peers but is nevertheless proud of his progress), WTA beliefs are unlikely to motivate behavioral remediation, given the absence of a perceived threat.

Applying the Conceptual Framework

Next, to demonstrate the relevance of our conceptual framework for understanding when, how, and for whom WTA beliefs can have long-term benefits, we will apply our framework to the domain of skill learning. Although we discuss only one example in depth, similar logic could be applied to extend our conceptual framework to a broad range of psychological domains ranging from friendship formation to political and moral psychology.

Skill Learning

Our framework suggests that WTA beliefs can have positive long-term benefits for people's abilities to learn and master new skills. Skill learning meets the pre-conditions of our framework because skill learning is a domain where people are motivated and can improve their own performance through effort. Individuals are motivated to learn and master new skills in part because it feels good to do so: mastery is a powerful predictor of subjective well-being (Carver & Scheier, 2000; McGregor & Little, 1998; Ryan & Deci, 2001). People are especially motivated to learn and master new skills when they feel like they are not living up to their own expectations (Ryan & Deci, 2000). In work settings, when people's performance is below their own aspiration levels, people become more likely to search for new strategies and change their behaviors to try to improve their performance (even if some risk is incurred; Greve, 2003). Furthermore, people work toward learning and developing their skills by observing and seeking critical feedback from others (Festinger, 1954; Henrich & Gil-White, 2001). For these reasons, when people are

learning or developing their skills, such as in educational and work settings, WTA beliefs may be especially likely to yield long-term benefits.

Research suggests that WTA beliefs lead individuals to seek out feedback from other people about how to improve their future performance (Walker & Smither, 1999), which can enhance performance on various lab-based tasks (Badami, Vaez Mousavi, Wulf, & Namazizadeh, 2012). In one of the few longitudinal studies in this area, managers who initially received the poorest feedback from their coworkers, and who used this feedback to seek out constructive comments from their peers, demonstrated the greatest performance gains over a five-year period as compared to managers who did not seek out peer feedback (Walker & Smither, 1999). This research provides initial evidence that WTA rather than BTA beliefs will facilitate the greatest gains in skill learning over time—especially when individuals seek out *peer feedback* and are provided with the opportunity to practice and develop their skills.

Indeed, the process of feeling WTA, seeking feedback, and using this feedback to improve one's skills is likely to unfold over time, given that many skills that are relevant to education and employment, such as reading or learning a new computer program, are ongoing processes that take people many years to master. Although some of our theorizing awaits empirical confirmation, research suggests that BTA beliefs may promote idleness and stagnation in one's skills. For example, success in prior endeavors can paradoxically lead people's future performance to decline, an effect that is mediated by complacency promoted by overconfidence (Audia, Locke, & Smith, 2000). Recent empirical evidence also suggests that overconfidence can have detrimental longitudinal impacts on leadership abilities because overconfident leaders are unable to see their deficiencies and fail to correct for them (Shipman & Mumford, 2011).

Feelings of threat: The role of entity/incremental theories and depression.

People's entity/incremental theories are likely to moderate the benefits of WTA beliefs for skill learning. If skills are seen as fixed, then perceiving oneself as WTA may only incur the downsides of anxiety and reduced self-esteem, since no avenue for remediating one's current skills deficits may appear available. The belief that skills can be grown, on the other hand, may nurture persistence of effort and adaptive change in response to WTA beliefs (Butler, 1987; Dweck, 1986). Across a variety of skills including motor learning (Wulf, Chiviakowsky, & Lewthwaite, 2012), exercise efficiency (Stoate, Wulf, & Lewthwaite, 2012) and management abilities (Brown, Farrington, & Sprinkle, 2014), individuals with a malleable view of their performance show improvements in skill learning as compared to individuals with a fixed view of their performance. These gains occur in part because negative feedback does not provide a global threat to self for these individuals, thereby decreasing the need to self-affirm after receiving negative performance feedback, which provides individuals with more time to focus on improving their own personal performance (Wulf, Lewthwaite, & Hooyman, 2013).

In fact, for individuals with a growth mindset, failure can promote greater learning and superior performance (Mangels, Butterfield, Lamb, Good, & Dweck, 2006). In a study in which people completed tests of their speed-reading and spatial-reasoning skills, individuals with a growth view of their abilities responded to negative performance feedback by searching for new strategies to improve performance (i.e., by examining the strategies of those who outperformed them), whereas individuals with a fixed view of their abilities appeared concerned mainly with shoring up their global self-regard after receiving equally negative feedback (i.e., by examining the strategies of those who performed even worse than they did; Nussbaum & Dweck, 2008). Thus, in the domain of skill learning, the benefits of WTA beliefs may accrue preferentially to individuals with a growth mindset; for individuals with a fixed mindset, WTA beliefs may cause

only loss of interest in and disengagement from activities (Bandura & Jourden, 1991), a response that, in many settings, may be less adaptive than the complacency cultivated by BTA beliefs.

As proposed in our framework, depression may also preclude individuals from selectively turning their attention toward social models and from seeking out critical skill-relevant feedback following WTA beliefs. People with depression are more likely to give up after experiencing failure on novel tasks and perform more poorly as compared to age-matched controls (Elliott, Sahakian, Herrod, Robbins, & Paykel, 1997; Holmes & Pizzagalli, 2007). People who report greater depressive symptomology are more likely to seek out more negative feedback from their peers after initially receiving performance-relevant negative feedback (Casbon, Burns, Bradbury, & Joiner Jr., 2005). Thus, depression may lead people to avoid the domain in which they feel WTA, or to look for negative feedback that reinforces their WTA beliefs, rather than to turn their attention toward relevant social models that could facilitate skill-learning and improvement.

Social attention: The role of Autism Spectrum traits and social referencing. Individuals who exhibit less spontaneous social attention and less interest in social interactions should also be less likely than other people to engage in behaviors that are necessary for the positive skill-relevant benefits of WTA beliefs to accrue. Although more research is needed to explore how ASD traits impact skill learning following WTA beliefs, there is a great deal of related research suggesting that individuals with ASD traits are less likely to attend to other people in their social environment, which can impact skill learning and performance over time.

Broadly, individuals with ASD traits demonstrate atypical development of movement skills and gestures (dyspraxia) when compared to age-matched controls (Dziuk et al., 2007; Staples & Reid, 2009). These delays occur because people with ASDs are less likely to imitate and attend to the actions of their peers—two behaviors that are critical for communication and

skill development (Ingersoll, 2008; Toth, Munson, Meltzoff, & Dawson, 2006). More specifically, these social attention deficits are associated with difficulties maintaining jobs, despite the fact that the majority of individuals with ASD do not experience cognitive deficits (Lord & Venter, 1992; Muller, Schuler, Burton, & Yates, 2003; Nesbitt, 2000). We speculate that individual differences related to social attention and social interest likely moderate the ability to learn and develop new skills following WTA beliefs, as they prevent individuals from attending to relevant and useful models, although more empirical research is needed to substantiate this claim.

Social approach: The role of social anxiety and neuroticism. We propose that socially anxious individuals are less likely to seek input from relevant social models following WTA information about their performance. In particular, people who experience WTA beliefs in combination with social anxiety are less likely to seek out feedback from relevant social models given the relatively low self-confidence they feel about their own performance—instead, they might choose to engage in avoidance-related coping strategies. Providing initial evidence for this point, executives who report greater anxiety at work are more likely to surround themselves with close supporters when work is not going well and are more likely to avoid taking strategic risks when work *is* going well (Mannor, Wowak, Bartkus, & Gomez-Mejia, 2015). The avoidance strategies that are documented in response to negative feedback could therefore result in behaviors that actually deter future success, such as the failure to seek out critical feedback.

People who report higher levels of neuroticism may also be less likely to seek out feedback following WTA beliefs; indeed, individuals who report higher levels of neuroticism report feeling more negative about interacting with another colleague at their workplace whom they believe is performing better than they are (Buunk, Van Der Zee, & VanYperen, 2001).

Thus, individuals who experience greater social anxiety and neuroticism might be less likely to turn to other successful individuals for skill-related feedback and advice, therefore limiting the ability of WTA beliefs to translate into improved performance and mastery over time.

Feedback: The role of trait anxiety and emotional intelligence. More general feelings of anxiety may also limit the benefits of WTA beliefs on skill learning, by negatively impacting an individual's ability to accept and effectively incorporate social feedback into her attempts at behavioral remediation. Indeed, after receiving critical feedback, individuals with higher self-reported trait anxiety are more likely to feel personally threatened and are more likely to experience decreases in self-efficacy as compared to individuals with lower levels of self-reported trait anxiety (Frey, Stahlberg, & Fries, 1986; Waldersee, 1994). In turn, these decrements in self-efficacy that often follow from the receipt of critical feedback are linked to decreased performance, such as lower job-relevant task performance (Randhawa, 2004).

Such performance decrements occur in part because after the receipt of critical feedback socially anxious individuals are less likely to seek out information that might help them to improve their performance. For example, in one study, students were provided with fictitious intelligence feedback that was either negatively or positively discrepant with their self-evaluations (Frey et al., 1986). Students were then provided with the opportunity to read one of several articles that either argued in favor of intelligence testing or derogated intelligence testing. In contrast to students with lower levels of anxiety, who showed no difference in their article choice as a result of the feedback they received about their intelligence, students with higher levels of generalized anxiety were more likely to select articles that criticized intelligence testing after receiving negative information about their intelligence. Although more research is needed to directly illustrate our point that individuals with higher levels of trait anxiety will be less able

to make use of WTA feedback to improve their long-term performance, these studies provide suggestive evidence that people who generally experience greater anxiety may be less likely to benefit from WTA beliefs.

In contrast, people who are emotionally intelligent, and who are better able to control their immediate negative responses to WTA beliefs, might stand to benefit most from WTA beliefs. Consistent with this possibility, individuals who score higher in emotional intelligence are better able to regulate their emotions in response to experiencing stressful life events, such as losing one's job (Troy, Wilhelm, Shallcross, & Mauss, 2010). In turn, enhanced emotion regulation can buffer against the negative effects of life stressors on mental health outcomes, such as depression (Robinson, Moeller, Buchholz, Boyd, & Troop-Gordon, 2012). More specific to our conceptual model, people with higher emotional intelligence respond more positively in the face of challenging situations. For example, although engaging in a challenging work experience can sometimes lead employees to feel incompetent, individuals who scored higher in emotional intelligence reported greater feelings of challenge, greater positive affect, and lower intentions to quit their jobs as compared to individuals who scored lower in emotional intelligence (Dong, Seo, & Bartol, 2014). These empirical findings provide initial evidence that individuals who score higher in emotional intelligence may be better equipped to transform WTA beliefs into long-term psychological and performance benefits, though more empirical work is needed to substantiate this proposition directly

In sum, the evidence that we have presented in this section provides evidence that WTA beliefs might incur long-term benefits related to motivating and improving skill learning, and it also identifies key gaps in the literature where more work would be necessary to substantiate the claims set by our conceptual framework.

Discussion

Social comparison is an inescapable aspect of human psychology—as we navigate our social worlds, it is common and natural for us to wonder, how *am* I doing compared to my peers? Although the belief that one is doing better than one's peers may be comforting in the short-term, the feeling that one is doing *worse* than one's peers may have long-term benefits. We have argued that these benefits may have been overlooked by researchers, in part because the benefits of WTA beliefs unfold over a longer time scale than can be captured in a typical lab-based study. We have also proposed a conceptual framework to understand when and for whom WTA beliefs are likely to yield long-term benefits. We have proposed that WTA beliefs are most likely to incur long-term benefits when they facilitate adaptive social attention, social approach, incorporation of feedback and behavioral remediation. Finally, we have proposed that WTA beliefs may yield benefits above and beyond other types of negative self-evaluations because the belief that one is performing below the average level of one's peers is uniquely motivating and promotes socially-focused behavioral remediation.

We have applied our conceptual model to explore the potential benefits of WTA beliefs in one specific domain—skill learning. However, empirical research suggests that WTA beliefs occur across multiple diverse domains; thus, the long-term benefits of WTA beliefs should also extend to other relevant domains. As proposed in our conceptual framework, for a WTA belief to incur long-term benefits, an individual must feel threatened and/or motivated to reduce their WTA beliefs, and an individual must believe that their standing in a relevant domain is subject to change. Based on these criteria, another domain whereby WTA beliefs should lead to long-term psychological benefits is friendship formation. The ability to form and maintain friendships is a critical determinant of subjective well-being and physical health (Cacioppo et al., 2008;

Cacioppo & Hawkley, 2003; Diener & Seligman, 2002; House, Landis, & Umberson, 1988) and forming and establishing social connections is a salient goal for most individuals (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). Most critically for our model, people can readily influence the quantity and quality of their day-to-day social interactions (Sandstrom & Dunn, 2014). Consequently, friendship formation is a domain that meets the pre-conditions of our conceptual framework as a domain where WTA beliefs might potentiate benefits over time.

Indeed, in our own recent research, conducted with 400 first-year university students, participants who believed that they were worse off socially (i.e., had made fewer new friends) than the average first-year student reported lower momentary well-being and belonging (Whillans, Jordan, & Chen, 2015). Nevertheless, the same students that held WTA beliefs about their social success reported making more close friends three months later (controlling for the number of close friends they already had; Whillans, Jordan & Chen, 2015). Thus, our own research—conducted with a large sample of students who were assessed over several months—supports our proposition that WTA beliefs can incur long-term benefits for friendship formation. Additional research is needed to explore the potential moderating conditions proposed by our framework, such as whether individuals that hold entity beliefs about their personality are less likely to reap the social benefits of WTA beliefs (see: Howe & Dweck, 2016 for additional discussion).

Furthermore, the long-term benefits of WTA beliefs might also have downstream consequences people's interactions with moral and political information. Another area in which the long-term behavioral and emotional effects of WTA beliefs have been under-investigated is moral standing. A diverse body of social psychological research has demonstrated that people care deeply about seeing themselves as morally good and that moral self-regard ("Am I a good

person?") responds dynamically to situational cues and feedback from the social environment (Monin & Jordan, 2009). Yet little is known about the long-term impact of believing oneself to be less (or more) virtuous than the average person.

In lab studies, participants have been shown to resent and put down “moral rebels” who behave in an ethically superior way (e.g., refusing to complete a racist experimental task) when this implicitly indicts the participants’ own prior behavior (e.g., completing the task; Monin, Sawyer, & Marquez, 2008). Similarly, in other studies, people ascribed negative qualities to moral vegetarians, particularly when thinking about the ways that they imagined the vegetarians might judge their own morality, a phenomenon that was dubbed “do-gooder derogation” (Minson & Monin, 2012). These examples suggest that feeling bad about one’s moral standing relative to other people—WTA beliefs in the moral domain, that is—may lead to petty takedowns of other people, an uncontroversially undesirable consequence. However, participants’ behavioral response options for dealing with their (presumed) feelings of moral inferiority were quite constrained in these paradigms (e.g., they did not have the option of subsequently demonstrating their own morality or improving their own moral choices), and it is possible that as with receiving more general negative performance feedback, short-term harms may give way to longer-term growth after a person comes to see himself or herself as morally WTA in a particular domain.

Indeed, there is some evidence that even in the short term, feeling less than adequate morally may engender positive behavior change, at least when an avenue to moral self-improvement is made available (Merritt, Effron, & Monin, 2010). When people were asked to write about a past misdeed, they were then more likely to express prosocial intentions for their future behavior, apparently as a means of repairing their moral self-regard (Jordan, Mullen, &

Murnighan, 2011). Similarly, after being assigned to write about themselves in a negative way, people donated more to charity than they otherwise did (Sachdeva, Iliev, & Medin, 2009). Exposure to other people's moral heroism, which could be assumed to make one feel less confident about his or her own moral standing, has also been shown to inspire feelings of elevation and consequent prosocial behavior in some conditions (Schnall & Roper, 2012; Schnall, Roper, & Fessler, 2010). Because all of these studies have looked exclusively at immediate consequences to situational manipulations in a lab setting, it is unclear how people's responses to more stable WTA or BTA beliefs about moral standing may affect behavior and emotions as they unfold over time. We argue that at least for people who believe that one's moral goodness (or badness) is not permanently fixed and can instead be changed effortfully (Chiu, Dweck, Tong, & Fu, 1997), WTA beliefs about moral standing are likely to elicit a long-term process of seeking moral self-improvement.

Our conceptual framework focuses on what happens *after* WTA beliefs arise regardless of *how* they arise. However, there are many interesting and potentially generative points of speculation about how the causes of WTA beliefs and/or the characteristics of WTA beliefs could moderate the long-term benefits, such as how accurate the WTA beliefs are, how far away the WTA beliefs are from the perceived social "average" and the extent to which people hold WTA beliefs across multiple personally-relevant domains. For example, the extent to which people's WTA beliefs reflect reality could moderate the long-term benefits. Recent research shows that most people can accurately reflect on whether they have overly positive or overly negative self-perceptions (Bollich, Rogers, & Vazire, 2015). Furthermore, being easy to judge (Human & Biesanz, 2013) and being generally accurate about other people's personalities (Human & Biesanz, 2011) is associated with greater subjective well-being. Research also

suggests that the best performing individuals are most likely to be accurately self-aware regarding their own performance (Kruger & Dunning, 1999). This research provides empirical evidence that having perceptions about the world that are biased in reality is psychologically adaptive. Similarly, WTA beliefs might be most likely to trigger an adaptive cascade of social and behavioral consequences when WTA beliefs accurately reflect reality.

The distance of an individual's WTA belief from a perceived social average could also moderate the long-term benefits. For example, individuals who believe that they are further from a relevant social "average" might be less likely to believe that they can successfully remedy their own behavior, and might fail to have an adaptive response to their WTA beliefs. Similarly, but in the opposite direction, individuals who believe that they are very close to the average, might underestimate the amount of effort needed to improve their performance, and fail to persist long enough to show marked improvements (Audia et al., 2000). Thus, having a WTA belief that is moderately distant from the perceived average might be the most adaptive for promoting the long-term benefits. Although more research is needed to substantiate this claim, this proposition is consistent with classic research in psychology showing that the most adaptive relationship between a set of variables and an outcome is often non-monotonic (e.g., Yerkes-Dodson law; Yerkes & Dodson, 1908; optimal arousal; Eysenck, 1967).

Relatedly, WTA beliefs might be most beneficial when they occur in one specific domain (vs. across multiple domains). This proposition is consistent with theorizing suggesting that positive psychological traits and virtues, such as courage, justice, and optimism, may have negative consequences when experienced too seldom or too frequently (Grant & Schwartz, 2011). For example, holding WTA beliefs across multiple personally-relevant domains at the same time is likely to result in a reduced desire or belief in one's ability to change one's own

performance. More specifically, individuals who feel WTA across multiple personally important domains, may experience shame that could prevent these individuals from asking for the advice of relevant others (Tracy & Robins, 2006).

Finally, our conceptual model proposes that individuals, after experiencing a WTA belief, should continue to persist in improving their performance by seeking out relevant social models and social feedback, and using this feedback to encourage behavioral remediation. However, recent empirical and theoretical research suggests that goal *disengagement* is a fundamental component of effective self-regulation (see: Wrosch, Scheier, & Miller, 2013 for a review). Consequently, in some cases, the most adaptive response to the experience of a WTA belief could be to select another activity with a greater likelihood of improvement. Following from this, another potentially productive area of research is to examine the boundary conditions for when WTA beliefs can be effectively remedied through subsequent approach-oriented actions such as seeking feedback, versus when they would be more effectively remedied through subsequent avoidance-oriented actions such as task disengagement. Future research should examine the specific components of WTA beliefs that predict whether the long-term benefits will arise—such as accuracy, perceived distance from the average, and the specificity of the WTA belief—to better understand whether an individual is likely to proceed through the steps of our proposed framework.

By outlining a conceptual model and proposing when and for whom the benefits of WTA beliefs are likely to arise, this paper speaks to the critical importance of examining the potential of WTA beliefs to provide a springboard to long-term psychological flourishing. It is our hope that this paper will encourage researchers to question not only why WTA beliefs occur, but when WTA beliefs may play an important role in successfully navigating our social environments.

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