The Alchemy of Acceptance:
How Accepting Emotions Enhances the Ability to Flexibly Work with Them

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Abstract

Positive psychology's study of human well-being has not fully examined the adaptive ways we encounter and interact with negative emotions. Research shows that acceptance, an emotion regulation technique involving non-judgmentally and non-reactively encountering negative emotion, benefits well-being. Acceptance provides a useful counterpoint to research demonstrating that some of the means we use to make ourselves feel better, including pursuit of or highly valuing happiness and avoidance or suppression of negative emotion, often backfire and harm well-being. As the field of emotion regulation matures and explores complex and blended strategies that individuals use to regulate their emotions, it should focus on the role that acceptance may play as an adaptive initial response to emotion that promotes emotion regulation flexibility. In taking up this inquiry, I seek to expand positive psychology's horizons toward a more complex view of human well-being – one that incorporates and even leverages the parts that are challenging and uncomfortable and offers a variety of tools for working with those experiences. Initially accepting emotions for what they are – complex, dynamic, and potentially useful sources of information about our perceptions of the world around us – might help us to learn from and respond to the world as it actually is.

Keywords: acceptance, emotion regulation, emotion regulation flexibility, mindfulness, equanimity

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Foreword

How you get there is where you'll arrive.

—Unknown

…But the dark embraces everything:

shapes and shadows, creatures and me,

peoples, nations — just as they are…

—R.M. Rilke, *The Book of Hours*, I, 11

Surrender. It's a powerful and fairly controversial word. To some it conjures up battlefield images of soldiers waving the white flag in evident defeat, or it is synonymous with giving up or giving in. But in many spiritual traditions, and particularly in their contemplative and mystical wings, the word and practice of inner surrender means something else entirely. In fact, inner surrender is considered the key to living out one's human purpose here on earth.

I was first introduced to this notion of surrender through a tiny book called *The Wisdom Way of Knowing*, authored by an Episcopalian contemplative priest named Cynthia Bourgeault (2003). In it, she presents a cogent argument that all of the world's great religions are actually primarily concerned with this core *soul gesture* (Bourgeault, 2003). The act of meeting whatever life throws at you with an open, receptive, surrendered and balanced state of mind is a powerfully transformative and transgressive act that amplifies our ability to act with purpose in the world. And this is also key - this discipline is described as inner surrender *plus* an outer response.

Although this paper will reframe this deeply spiritual idea in terms of secular science, I think it's helpful to begin here, close to the heart of the matter. We have some pretty serious transformation to do, and some deeply painful truths to confront - as individuals, as a society, as

a species - in order to redress injustice and meet the challenges ahead. For example, what would it look like for white persons to cultivate the capacity to actually feel the grief that arises when we witness violence inflicted through institutionalized white supremacy against black persons, indigenous persons, and other people of color, both past and present? What would be different if we learned to not judge or push away that negative emotional experience? Would white persons, myself included, be better able to witness our complicity and surrender our privilege? Would we be better able as a society to embody this shift in our systems and institutions? What would it look like for human beings to comprehend and feel the loss of natural ecosystems and a collapsing climate? Might economically privileged individuals, myself included, willingly agree to accept less material comfort than they have known?

I am deeply curious whether this kind of inner surrender can help us in these tasks - whether it can actually help us to choose to change and grow even at the expense of short term physical or psychological comforts. At the very least, science indicates that surrender, framed as emotional acceptance, will not lead us into despair and may, in fact, heighten well-being and the ability to adapt to a changing world. In some ways, this idea is the red thread connecting all of the phases, stages, degree programs and personal work that constitutes of my own search for meaning, wisdom and transformation. I've followed it through science, religion, philosophy, and personal practice, and through the hearts of my great teachers. In gratitude, I dedicate this contribution to all of my teachers in this life, known and unknown, direct and indirect, living and passed on, who have helped me to follow this thread, and to the memory and lasting presence of one such teacher in particular: Doug Silsbee. *** Presence Pause ***

I. Introduction

We seem to be entering the age of agility – the concept is everywhere. Our fast-paced, constantly changing world seems to be cultivating a hunger for tools that will better equip us to create, experiment, and adapt on the fly. There is an agile approach to software development, project management (Stellman & Greene, 2015) and to leadership effectiveness (Hoff & Burke, 2017). The agile movement has also reached psychology. Recently, Dr. Susan David (2016) published the popular book *Emotional Agility: Get Unstuck, Embrace Change, and Thrive in Work and Life*, a concept that she defines as "being flexible with your thoughts and feelings so that you can respond optimally to everyday situations" (p. 5) and which is heavily influenced by the construct of psychological flexibility as it is expressed within the clinical model of Acceptance and Commitment Therapy (ACT).

One concept that is sometimes offered as a counterweight to our always-on, agility-obsessed culture is mindfulness. Mindfulness has also received a lot of popular attention, both within psychology and without, as an "antidote of sorts to the ills of the modern world" (Smalley & Winston, 2010, p. xv). It is often defined as the act of paying attention, on purpose, in the present moment, nonjudgmentally (Kabat-Zinn, 1994). Even though these two concepts – flexibility and mindfulness – at first appear diametrically opposed, they actually complement and overlap with each other in fascinating ways (for a review of how these processes work together therapeutic settings, see Hayes, Villatte, Levin, & Hildebrandt, 2011).

Acceptance, the topic of this paper, is one such area of overlap. Acceptance is a key component of both psychological flexibility (Hayes, Luoma, Bond, Masuda, & Lillis, 2006) and mindfulness (e.g., Bränström & Duncan, 2014; Lindsay & Cresswell, 2019). Acceptance is an emotion regulation strategy, generally defined as willingness to experience emotions and related

thoughts, without judgment and without needlessly reacting to them (e.g., Hayes et al., 2006; Shallcross, Troy, & Mauss, 2015; Troy, Shallcross, Brunner, Friedman, & Jones, 2018; Lindsay & Creswell, 2019). Self-reported trait acceptance is associated with greater psychological well-being (Ford, Lam, John, & Mauss, 2018), less negative emotion in response to daily stressors (Feldman, Lavallee, Gildawie, & Greeson, 2016; Ford et al., 2018), less rumination (Ciesla, Reilly, Dickson, Emanuel, & Updegraff, 2012), and greater overall psychological health (Kashdan, Barrios, Forsyth, & Steger, 2006).

Emotions, including negative emotions, are a fact of life for human beings. The field of emotion regulation concerns itself with the ways we influence which emotions we experience, when we experience them, and how they are expressed (Gross, 2015). Effective emotion regulation is linked to resilience (e.g., Bonanno, Papa, Lalande, Westphal, & Coifman, 2004; Shallcross et al., 2015), and to well-being and mental health (Berking et al., 2012; Kashdan & Rottenberg, 2010). No single strategy for responding to emotion or corresponding thoughts is considered universally helpful or adaptive; rather, adaptiveness largely depends on context (Bonanno & Burton, 2013; see also Gross, 2015). In response to this and other similar findings, the field of emotion regulation has begun to explore the concept of emotion regulation flexibility. Aldao, Sheppes and Gross (2015) describe emotion regulation flexibility as the covariance between emotion regulation variability (i.e., strategy use) and changes in context - in other words, flexible regulation occurs when emotion regulation strategy use is *synchronized* with changes in the environment or an individual's appraisals of those changes (Aldao et al., 2015). Emotion regulation flexibility has itself been associated with well-being related outcomes (for a review, see Kashdan & Rottenberg, 2010). Scholarly attention to these topics continues to grow,

but many gaps remain in understanding how they work together and how they contribute to well-being.

This paper has two main purposes. First, to identify gaps in the emotion regulation and acceptance literature about which further research is needed. Specifically, this paper proposes that acceptance, as an initial response to negative emotion, may promote adaptive emotion regulation flexibility (i.e., flexible regulation of emotion that facilitates pursuit of meaningful goals; Aldao et al., 2015). Because flexible regulation of emotion is itself associated with psychological health (Bonanno et al., 2004; Kashdan & Rottenberg, 2010) acceptance of negative emotions may be a significant pathway to well-being. This paper also proposes three mediators of the relationship between acceptance and emotion regulation flexibility that should be the focus of additional research.

Second, this paper aims to identify the ways in which positive psychology has lagged in its approach to emotion regulation and how it might improve by embracing the broader perspective indicated by the growing area of research on acceptance and emotion regulation flexibility. This paper proposes two key shifts in perspective that warrant further research is, specifically that (a) pursuing well-being often involves substantial psychological risk and encounters with challenging and negative processes, and (b) avoiding such experiences or suppressing negative emotions can sabotage well-being.

To fulfill these two purposes, this paper will first provide a history and critique of positive psychology, including its tendency to take an acontextual approach to well-being and its prioritization of positive emotions. Next, this paper will review the research literature on emotion regulation, emotion regulation flexibility, and acceptance. The review of acceptance research will also address certain key mechanisms by which acceptance promotes well-being in order to

highlight how they might promote emotion regulation flexibility. The discussion includes: (a) a proposed conceptual model of the relationship between acceptance, emotion regulation flexibility, and well-being, including three key mediators of the relationship between acceptance and emotion regulation flexibility about which more research is needed; (b) identification of other areas for future research on acceptance; and (c) identification of other areas for future research on emotion regulation within positive psychology.

II. Brief History & Critical Analysis of Positive Psychology

In his 1998 President's Address to the American Psychological Association, Martin Seligman introduced his proposal for the new science of positive psychology (Fowler, Seligman, & Koocher, 1999). His goal for this new field was to "articulate a vision of the good life that is empirically sound…understandable and attractive" (Fowler et al., 1999, p. 560). Later, he would define positive psychology as the empirical study of positive experiences, positive traits, and positive institutions (Seligman & Csikszentmihalyi, 2000). In the two decades since Seligman's address, positive psychology has flourished, generating thousands of studies, popular books, and articles aimed at describing and enhancing human well-being.

Positive psychology is an applied science that has sought to develop and test science-based *positive interventions* aimed at improving well-being (e.g., Bolier et al., 2013; Sin & Lyubomirsky, 2009; White, Uttl, & Holder, 2019). Scholars have not reached consensus on a general definition of positive interventions, but they have identified certain common criteria. For example, Parks and Biswas-Diener (2013) propose three: (a) the intervention aims to build a positive variable, (b) there is empirical evidence that the intervention actually changes the variable in question, and (c) there is empirical evidence that shifting the target variable will have a positive impact in the relevant population.

Given this framework for the field, positive psychology needed to answer two preliminary questions, each with philosophical and scientific implications. First, the new science's declaration of a *positive* orientation required that it define positive. Second, its declaration of well-being as the desired outcome required that it define what constitutes well-being—a question that has been debated for centuries. With respect to the first question, positive psychology takes a metaphysical orientation – it assumes the positive exists (Csikszentmihalyi, 2000). Positive psychology's epistemological method (how we know what we know) is scientific/empirical; we know the positive exists (that it is real) because we can observe it and represent it mathematically (e.g., Pawelski, 2016). And positive psychology proposes that well-being is not simply the absence of ill-being, but something distinct and different (Carver, Sutton, & Scheier, 2000; Pawelski, 2016). Pawelski (2016) conceptualizes human experience as occurring on a spectrum ranging, for example, from -10 (extreme ill-being) to 10 (optimal human functioning). He posits that once people achieve a neutral zero, they must experience more and different distinct shifts toward the positive to advance to 10 (Pawelski, 2016).

In answer to the second question, what constitutes a good life, positive psychology has generally embraced an expansive view of well-being that includes both hedonic (i.e., feeling well) and eudaemonic (i.e., functioning well) expressions (Seligman & Csikszentmihalyi, 2000; Ryan & Deci, 2001). These two models appeared in research long before the dawn of positive psychology (Ryan & Deci, 2001). Subjective well-being (SWB), a measure of life satisfaction, positive affect, and negative affect, developed out of the hedonic stream (Diener, Emmons, Larson, & Griffin, 1985; Diener, Suh, Lucas, & Smith, 1999). Researchers have developed a variety of measures and markers of eudaemonic well-being. For example, Ryff and Singer (1998) define psychological well-being (PWB) as including autonomy, personal growth, self-

acceptance, life purpose, mastery, and positive relatedness. Ryan and Deci (2000)'s self-determination theory proposes that the path to the eudaemonic life involves satisfying three core needs for autonomy, competence, and relatedness. In an attempt at synthesis and practical guidance, Seligman (2011) developed PERMA, which describes five key drivers of well-being: positive emotions, engagement, relationships, meaning, and accomplishment (Seligman, 2011). And, in a proposal for future positive psychology study, Wong (2011) points to several other varieties of the *good life*, including the prudential (based on high engagement), and the chaironic (based on a sense of awe, gratitude, and oneness with nature of God; Wong, 2011). Very recently, Oishi and colleagues (2019) have proposed that the good life may be defined as a psychologically rich life "characterized by a variety of interesting and perspective shifting experiences" (p. 7).

Positive psychology's positive orientation and approach likely helped drive its ascendance and productivity. After all, people appear to be highly motivated to feel positively (Diener, Sapyta, & Suh, 1998; Tamir & Ford, 2012). But, as illustrated by the work of many researchers, some of whom consider themselves to be working from within positive psychology, the approach leaves much room for adjustment, clarification, and expansion (e.g., Ivtzan, Lomas, Hefferon, & Worth, 2016; Kashdan & Rottenberg, 2010; Mauss, Tamir, Anderson, & Savino, 2011; McNulty & Fincham, 2011; Wong, 2011).

For example, one repeated critique of positive psychology is that its categorization of certain experiences, traits, or interventions as inherently positive or negative is not sufficiently sensitive to context. There are two aspects to this critique. First, to the extent that positive psychology might be interpreted to recommend that people avoid negative experiences and emotions and strive for positive experiences and emotions no matter the context, this could lead

to maladaptive results. In the face of injustice or situations requiring confrontation, positive emotions such as happiness are not adaptive—anger may be more functional (Tamir, Mitchell, & Gross, 2008; see also Kashdan & Rottenberg, 2010). Further, research has found that an individual preference for happiness in contexts that require other emotions is linked to lower well-being (Tamir & Ford, 2012). And, highly valuing or pursuing happiness has been shown to sometimes backfire, leading to lower well-being (Ford & Mauss, 2014; Mauss et al., 2011). In short, positive emotions may not always contribute to well-being. Similarly, experiencing negative emotions does not always harm well-being (Ivtzan et al., 2016; Kashdan & Rottenberg, 2010). Certainly, some positive psychology scholars have acknowledged that ostensibly negative emotions and experiences can promote growth and well-being (Wong, 2011) and that building individual competencies to adaptively manage negative experiences (such as grit and resilience) can contribute to well-being (Duckworth, Peterson, Matthews, & Kelly, 2007; Reivich, Seligman, & McBride, 2011). But there is room for more work in this vein.

The second aspect of this common critique of positive psychology underscores that positive interventions might not affect everyone in the same way—a one-size-fits-all approach is unlikely to uniformly contribute to well-being. Contextual variables, including individual, social, cultural, or structural factors can influence whether or not an ostensibly positive experience is actually positive and whether it, in fact, contributes to well-being (Wong, 2011; Prilleltensky, 2012; Parks & Biswas-Diener, 2013). For example, in one review of positive interventions, Parks and Biswas-Diener (2013) encourage additional attention to nuance and context as they point to evidence that intervention outcomes vary depending on individual factors (e.g., motivation and current well-being), cultural factors (e.g., norms and expectations for behavior), and structural factors (e.g., how the interventions are delivered and packaged; Parks & Biswas-Diener, 2013).

This critique boils down the point that positive is not always positive - a point that has support in empirical work (for a review, see Forgas, 2014).

These critiques, which appear to have validity, suggest that positive psychology should be more attentive to how the interrelationship between positive and negative contributes to well-being. Evidence indicates that positive emotional experiences do not always contribute to well-being and that negative emotional experiences sometimes do (Kashdan & Rottenberg, 2010). As a first step, I encourage a clarification that illustrates a more complex perspective on the pathways to well-being. Positive psychology might currently be misunderstood as primarily or exclusively endorsing positive emotions as the pathway to well-being, and that the pathway is linear and predictable. Therefore, more work is needed to clarify that (a) pursuing well-being often involves substantial psychological risk and encounters with challenging and negative processes, and (b) avoiding such experiences or suppressing negative emotions can sabotage well-being.

III. Positive Psychology, Emotion, & Emotion Regulation

Positive psychology's aim of improving well-being at least partially depends on people's ability to attend to and flexibly regulate their emotions (e.g., Berking et al., 2012; Bonanno et al., 2004; Gross & John, 2003; Kashdan & Rottenberg, 2010; Shallcross et al., 2015). Acceptance (discussed in more detail in Section IV) is an emotion regulation strategy that involves willingness or openness to experiencing thoughts, emotions, or sensory experiences without judgment and/or needlessly reacting to them (e.g. Hayes et al., 2006; Lindsay & Creswell, 2019; Shallcross et al., 2015; Troy et al., 2018). Acceptance is an uneasy and somewhat ironic member in the club of emotion regulation strategies because, by definition, acceptance involves *not* attempting to control or change one's emotional experience (Ford et al., 2018). Nonetheless,

Dan-Glauser and Gross (2015) note that acceptance is properly classified as an emotion regulation strategy due to its key features, such as directing attention to emotional experience and making efforts to override automatic emotional responses.

One primary aim of this paper is to articulate and support my proposal that acceptance promotes flexible regulation of emotion in service of purposeful behavior which, in turn, promotes well-being. To describe how acceptance interacts with emotions in this way, I first introduce the expansive area of affective science by defining emotions and emotion regulation, connecting emotion regulation to well-being, introducing the concept of emotion regulation flexibility, and illustrating how research on acceptance and other emotion regulation techniques augment positive psychology's treatment of emotion.

A. Defining Emotions, their Characteristics, and their Purpose.

Emotions are a fact of human life that can substantially influence well-being. According to Gross (2014), how we work with and respond to emotions and/or the circumstances that give rise to them has been the subject of psychological study for much of the last century. This body of research has included, for example, the study of psychological defenses, coping, attachment, self-control, self-regulation, and emotion regulation (Gross, 2014).

Emotions are complex, multi-system, and multi-dimensional phenomena (Gross, 2014). One necessary but not sufficient property of emotions is valence - the subjective distinction between good/bad or positive/negative (Clark-Polner, Wager, Satpute, & Barrett, 2016). Valence is also attributed to experiences that are not generally considered emotion, such as the enjoyment or distaste of food or feelings of fatigue (Clark-Polner et al., 2016), and some researchers refer to these less cognitively complex responses as *affect* (Gross, 2015). Another feature of emotions is that they occur in response to an appraisal that a stimulus (think, rustling bushes at your feet) is

relevant to a current goal (think, not to die from a snake bite). In other words, emotions constitute our brain's output or response that arises from ongoing comparisons of current conditions to some desired state (Gross, 2014). Both valence and the appraisal of relevance may be active outside of consciousness (Gross, 2014).

Emotions provide us with information that we use, often unconsciously, to inform behavior in support of goals (Gross, 2015). Barrett (2018) offers that emotions generally serve three types of individual goals: First, they help us make meaning from a given situation. Second, they prescribe helpful action. Third, they help us regulate our body budget, which Barrett defines as our metabolic balance of energy. In addition to these individual goals, emotions also serve two types of social goals: communication, and social influence (Barrett, 2018). Emotions convey information to support these goals through multiple pathways, including inner psychological experiences, as well as behavior and physiology – in other words, they are a "whole-body phenomenon" (Gross, 2014, p. 4).

B. Emotion Regulation.

Evidence indicates that individuals have the power to influence their emotions in ways that affect their well-being, and emotion regulation is the field of study dedicated to the ways in which people intentionally or unintentionally shape their own emotional experiences (Gross, 2015). The field concerns itself with the ways we influence which emotions we experience, when we experience them, and how they are expressed (Gross, 2015). The field gained prominence in the early part of this century (Gross, 2015) and is currently undergoing a transformation (Ford, Gross & Gruber, 2019). Research has linked effective emotion regulation processes to the promotion of resilience (e.g., Bonanno et al., 2004; Shallcross et al., 2015), and to well-being and mental health (Berking et al., 2012; Kashdan & Rottenberg, 2010). Emotion regulation may

also be a core process by which mindfulness has its effects (Bränström & Duncan, 2014; Holzel et al., 2011), and it is core feature of clinical treatment models like cognitive behavioral therapy (CBT;) (for a review, see Beck & Dozois, 2011). Deficiencies in emotion regulation are associated with psychopathology (Hofmann, Sawyer, Fang, & Asnaani, 2012).

Emotion regulation occurs when an individual activates a goal to change or influence emotional experience and deploys a strategy for doing so (Gross, 2015). Gross' (2015) process model of emotion regulation, and later the extended process model (for a review, see Gross, 2015) has proven highly influential in the field. The process model maps the process of emotion regulation onto a simple model of emotion generation (i.e., the modal model; Gross, 2014). The modal model describes four phases of emotion generation: situation (i.e., stimulus), attention, appraisal (i.e., cognitive evaluation of the stimulus), and response (i.e., emotion; Gross, 2014). Individuals may deploy emotion regulation strategies at any point in this process and researchers sometimes categorize regulation strategies based on the point at which they intervene. For example, distraction is considered an attentional deployment strategy and reappraisal is considered a cognitive change strategy (Gross, 2014).

Much early emotion regulation research examined particular emotion regulation strategies. Three of the most commonly-researched strategies are: (a) distraction (i.e., shifting attention away from the stimulus); (b) reappraisal (i.e., changing how one thinks about the emotion-eliciting event or the emotion itself); and (c) suppression (i.e., acting to suppress the expression of emotion, the experience of emotion, or thoughts of the emotion eliciting event; Webb, Miles, & Sheeran, 2012). These strategies are not always defined in the same way, which has led to some variation in the research findings about a given strategy (Webb et al., 2012). Increasingly, the field is recognizing that individuals may deploy concurrent or sequential

emotion regulation goals and/or emotion regulation strategies in response to a single stimulus or event, a concept known as emotion polyregulation (Ford et al., 2019).

C. Emotion Regulation Flexibility.

Research on emotion polyregulation, defined above, and on emotion regulation flexibility, defined below, both aim to better describe the dynamic and complex means by which humans interact with their emotional states in context (Aldao, 2013; Aldao et al., 2015; Ford et al., 2019). Emotion regulation research historically aimed to describe emotion regulation strategies as generally maladaptive or adaptive – meaning that they generally harm or help well-being (Gross, 2015). For example, research generally touted reappraisal as adaptive and suppression as maladaptive (John & Gross, 2004). But, more recently researchers have come to appreciate that no single strategy for responding to emotion or corresponding thoughts is universally helpful or adaptive; rather, adaptiveness largely depends on context (Bonanno & Burton, 2013). For example, reappraisal is less effective in highly intense emotional situations (Sheppes, Catran, & Meiran, 2009). And higher levels of reappraisal ability are associated with poorer psychological health outcomes in the context of controllable stressors (Troy, Shallcross, & Mauss, 2013; see also Ford & Troy, 2019), suggesting that over reliance on reappraisal might lead a person to be less likely to take action to reduce stress. And, although much evidence indicates that suppression or avoidance of negative emotions is maladaptive regardless of context (Berking et al., 2011; Kashdan et al., 2006), suppression of expression of emotion (as opposed to suppression of the experience of emotion) does change the momentary subjective experience of emotion (Webb et al., 2012). These and other similar findings indicate that both context, including an individual's skill in deploying a given strategy (Ford & Troy, 2019), and an individual's goals (for emotion regulation and otherwise) impact the effectiveness of emotion

regulation strategies in daily life. The concept of emotion regulation flexibility has emerged in response to these and other similar findings (Bonanno & Burton, 2013; Aldao et al., 2015).

Flexible responding to one's emotions and experiences has been a focus of much psychological research and clinical practice. For example, psychological flexibility is a multi-process model of psychological health at the core of the clinical model known as Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 2012). It is defined as the ability to "consciously contac[t] the present moment without needless defense while persisting or changing behavior in the service of chosen values" (Hayes et al., 2011, p. 155). In this model, acceptance is one of six processes that promote psychological flexibility (Hayes et al., 2012).

ACT's model of psychological flexibility shares some similarities with the concept of emotion regulation flexibility, which researchers have described in several ways. Bonnano and Burton (2013) describe it as variation in individuals' abilities to be sensitive to context, implement various emotion regulation strategies, and shift or continue them in response to feedback. Aldao, Sheppes and Gross (2015) describe flexibility as the covariance between emotion regulation variability (i.e., strategy use) and changes in context - in other words, flexible regulation occurs when emotion regulation strategy use is *synchronized* with changes in the environment or an individual's appraisals of those changes (Aldao et al., 2015).

Importantly, Aldao and colleagues note that, in contrast with much historical work on the construct of flexibility, it is not helpful for researchers to view the flexibility process as inherently adaptive. Instead, they argue, we should approach it neutrally, and seek to identify the contexts in which it leads to positive outcomes (Aldao et al., 2015). They suggest that flexibility may be adaptive insofar as it is deployed in service of a valued goal (Aldao et al., 2015). What both the ACT construct of psychological flexibility and emotion regulation perspectives on

flexibility share is an emphasis on sensitivity to context, flexible or non-rigid behavioral patterns in response to context, and the direction of behavior toward meaningful ends (Aldao et al., 2015; Hayes et al., 2012).

i. Emotion regulation flexibility and psychological health. Though in its early stages, research has found that emotion regulation flexibility is associated with beneficial outcomes. Bonanno, Papa, Lalande, Westphal, and Coifman (2004) found that the ability to flexibly suppress or express emotion predicted better adjustment and adaptation over a two-year period among college students who lived in New York City during the September 11th terrorist attacks (Bonanno et al., 2004). This finding was subsequently replicated and extended with a different population that experienced varying levels of life stress (Westphal, Seivert, & Bonanno, 2010). And Aldao & Nolen-Hoeksema (2011) found that the putatively adaptive regulatory strategies of reappraisal and acceptance were negatively associated with psychopathology only when individuals also reported using high levels of maladaptive strategies, such as rumination, suppression, and avoidance (Aldao & Nolen-Hoeksema, 2011). This finding suggests that the size of people's emotion regulation repertoires, and the types of strategies they contain, impact their psychological health outcomes. Additionally, significant evidence exists that ACT's construct of psychological flexibility, which is similar to emotion regulation flexibility, is related to better psychological health (for one meta-analysis, see Ruiz, 2010).

Both the ACT psychological flexibility model and emotion regulation flexibility as presented by Aldao and colleagues (2015) emphasize that flexibility is adaptive insofar as it facilitates purposeful behavior (as opposed to being adaptive as an end unto itself). Aldao and colleagues (2015) posit that emotion regulation flexibility may be adaptive if it facilitates the pursuit of *personally meaningful* intrinsic or extrinsic goals (Aldao et al., 2015). In ACT,

committed, values-based action or behavior contributes to psychological flexibility (Hayes et al., 2012). ACT emphasizes values to support individual ownership of actions and behavior – a sense of agency and responsibility (Hayes et al., 2012). Values are *freely chosen* (i.e., not enforced by others or circumstance; Hayes et al., 2012). And values cannot be achieved in the same way that goals can, but they can guide behavior during goal-pursuit (Hayes et al., 2012).

The primary distinction between these two perspectives is that the Aldao et al. (2015) hypothesis regarding adaptive emotion regulation flexibility leaves open the possibility that flexible regulation in pursuit of *emotion goals* might be adaptive, whether those goals are hedonic (i.e., increasing positive affect or decreasing negative affect) or counter-hedonic (i.e. instrumental increase or decrease of an emotion for a purpose other than pleasure/comfort) (Aldao et al., 2015). Although this perspective is not incompatible with ACT, ACT posits that rigid attempts to reduce or eliminate aversive internal states (what might be termed rigid or habitual hedonic emotion goals) often characterizes pathological behavior (i.e., impulsive and context-insensitive action to avoid or enhance psychological experience; Hayes et al., 2012). Instead, ACT emphasizes values-aligned behavior and *values-consistent* goals (Hayes et al., 2012).

This focus on purposeful goal- or values-oriented behavior creates an important link between flexible self-regulation, including emotion regulation flexibility, and well-being. Several models of well-being include elements that require or incorporate these kinds of behaviors, including Psychological Well-Being (i.e., personal growth and mastery; Ryff & Singer 1998) and Self-Determination Theory (i.e., intrinsically motivated goal pursuit; e.g., Ryan & Deci, 2000). This alignment between flexibility constructs and models of well-being provides additional theoretical support for the notion that flexibility supports well-being.

ii. The emotion regulation strategy of acceptance and its fit within positive psychology. This paper focuses on the emotion regulation strategy of acceptance, which is discussed in detail in Section IV. The discussion here focuses on positive psychology's relative inattention to a range of emotion regulation strategies (including acceptance) that can contribute to well-being and the field's tendency to utilize acceptance only as a way to up-regulate positive emotions.

As noted above in Section II, positive psychology has been criticized for overlooking the impact of context (i.e., positive interventions and emotions are sometimes presented as potentially effective at promoting well-being for all people in all situations). Consistent with this critique, certain celebrated positive psychology interventions rely on a narrow set of emotion regulation strategies—as if these few will be universally effective. For example, leaders in positive psychology such as Dr. Karen Reivich and Dr. Martin Seligman have developed large-scale programs to promote resilience, such as the Army's Master Resilience Training (MRT) and the Penn Resilience Program (PRP; Reivich et al., 2011). These programs draw heavily from CBT, specifically, research by Albert Ellis, Aaron Beck, and Marty Seligman (Reivich, et al., 2011). They teach CBT-based skills that emphasize monitoring, testing, and challenging the content of thoughts and beliefs in order to change emotions and behavior (Reivich et al., 2011). The program emphasizes the skill of cognitive reframing or reappraisal, which is an emotion regulation technique whereby individuals change the way they are thinking about a situation or stimulus in order to change its emotional impact (Reivich et al., 2011).

These resilience programs have been successful at improving well-being in their target populations (Brunwasser, Gillham, & Kim, 2009; Harms, Herian, Krasikova, Vanhove, & Lester, 2013), but continued innovation may lead to even better outcomes. For example, these programs

appear to overlook a range of useful emotion regulation strategies like acceptance and mindfulness which approach emotions in a different way. The primary distinction is that mindfulness and acceptance generally profess a different goal for interacting with negative thoughts and emotions than CBT-based interventions. The goal of CBT is to help the individual to *intentionally shift the content* of cognition in order to shift behaviors and affect (Beck & Dozois, 2011). On the other hand, mindfulness and acceptance-based approaches generally emphasize changing how one *relates to* thoughts and feelings.

Notably, although the goals of acceptance and CBT differ, they may complement one another. There is increasing evidence that using acceptance *facilitates* subsequent cognitive change or overlaps with such processes (Garland, Gaylord, & Fredrickson, 2011; Troy, Shallcross, Davis, & Mauss, 2013; Wolgast, Lundh, & Viborg, 2013). For example, in one study, Troy and colleagues (2013) measured participants' cognitive reappraisal ability. The study compared this ability between individuals who had undergone traditional CBT and those who had undergone Mindfulness-Based Cognitive Therapy (MBCT; Troy, Shallcross, Davis, et al., 2013). Acceptance is a key process in MBCT (Segal, Williams, Teasdale, 2002). The researchers found that participants with a history of MBCT performed better on the laboratory measure of cognitive reappraisal than did those with a history of CBT or from a no-therapy control group (Troy, Shallcross, Davis, et al., 2013). Although this study has some methodological flaws, this finding is important because it indicates that even though acceptance does not aim to change emotional experience, it is compatible with other techniques that do. This notion is supported by other research demonstrating that mindfulness and acceptance facilitate emotion regulation (Coffey & Hartman, 2008; Garland et al., 2011; Kashdan et al., 2006).

Another critique of positive psychology that applies to acceptance-based emotion regulation is its tendency to prioritize positive emotions. Positive psychology interventions have not entirely overlooked acceptance, but they have tended to approach acceptance primarily as a way to up-regulate positive emotions through mindfulness interventions. Acceptance is an aspect of mindfulness, and the psychological study of acceptance has its roots in mindfulness research (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Hölzel et al., 2011) as well in clinical models that incorporate mindfulness and acceptance as processes, such as MBCT and ACT (Hayes et al., 2012; Segal et al., 2002). Although some positive psychology researchers have embraced mindfulness approaches (Fredrickson et al., 2017; Niemiec, Rashid, & Spinella, 2012), their focus has primarily been on the study of positively-valanced emotions.

For example, in a series of studies, Fredrickson et al. (2017) has used mindfulness-based interventions as a means for increasing positive affect. It is a central tenet of positive psychology that positive emotions are not only markers of well-being, they promote or lead to well-being (e.g., Fredrickson, 2001; Lyubomirsky, King, & Diener, 2005). And some of positive psychology's most well-known interventions, such as the gratitude practice (Wood et al., 2010), are designed to upregulate positive emotion. For an individual who is seeking to improve their well-being, increasing positive emotions through a loving-kindness or other meditation (Fredrickson et al., 2017) or a gratitude practice (Wood et al., 2010), would seem an easy entry point.

As the positive psychology critics have pointed out, however, actively pursuing positive emotions will not always contribute to well-being. As noted above, accumulating evidence reflects that seeking or pursuing positive emotions may backfire, resulting in lower levels of well-being, more depressive symptoms and more loneliness (for a review, see Ford & Mauss,

2014; but see also Luhmann, Necka, Schönbrodt, & Hawkley, 2016). Ford and Mauss (2014) propose three potential mechanisms that may be driving this effect, specifically with the emotion of happiness: individuals set unrealistic goals for happiness and subsequently experience disappointment, individuals often choose misguided strategies for pursuing happiness, and increased monitoring of the goal of happiness interferes with the experience of happiness (Ford & Mauss, 2014). Mindfulness and acceptance interventions generally do not encourage setting and pursuing unrealistic emotion goals, and so they may avoid these pitfalls. Instead, they promote acceptance and awareness of emotions as they arise (Lindsay et al., 2018). Instead of focusing solely on the upregulation of positive emotions, positive psychology might, instead, choose to promote mindfulness and acceptance interventions to leverage the benefits of accepting emotions as they are, without the automatic drive to always upregulate the positive or avoid the negative. This recommendation is supported by a large body of accumulating evidence that avoiding negative experiences can harm well-being. Specifically, avoiding negative experiences consistently is associated with poor psychological outcomes, including psychopathology (Chawla & Ostafin, 2007; Kashdan et al., 2006).

One reason that avoidance can harm well-being is that it often causes negative thoughts to multiply. A classic thought suppression study by Wegner, Schneider, Carter, and White (1987) demonstrated that, paradoxically, individuals instructed *not* to think about a white bear actually thought about it more frequently than individuals who were free to think about any topic (Wegner et al., 1987). Experiential avoidance, or unwillingness to be in contact with aversive psychological experiences, appears to negatively influence the quality of daily lived experiences (Kashdan et al., 2006). It has been associated with more negative and less positive experiences and greater levels of negative emotion (Kashdan et al., 2006). Avoiding negative thoughts and

feelings is often associated with the emotion regulation strategy of suppression, which has been associated with *increased* nervous system and negative emotional responses in laboratory studies (for a summary, see Gross, 2014). Even procrastination, that scourge of contemporary life, can be framed as a pattern of emotional avoidance, i.e., the tendency to prioritize short term mood repair – making oneself feel better right now – at the expense of future emotional experiences (Sirois & Pychyl, 2013).

In sum, evidence indicates that seeking happiness can backfire and that avoiding negative emotions can increase them. This suggests that pursuing positive emotional states as an end unto themselves may not be the most helpful approach. Acceptance presents itself as an intriguing alternative. I will now turn to a more thorough exploration of this topic.

IV. Acceptance: A Potential Contributor to Emotion Regulation Flexibility

A. Introduction to Acceptance.

A primary purpose of this paper is to propose that acceptance of negative emotion facilitates flexible emotion regulation and subsequently well-being. My proposed model, explored in more detail in the Discussion below, posits that acceptance, as an initial response to negative emotion, facilitates adaptive emotion regulation flexibility in service of meaningful goals and, consequently, well-being. This is a somewhat novel approach – most research has examined acceptance as a stand-alone strategy or as an aspect of mindfulness, rather than as a contributor to emotion regulation flexibility. I drew inspiration for this model from ACT where acceptance plays a key role in psychological flexibility – a construct that shares some commonalities with emotion regulation flexibility (Hayes, Strosahl, & Wilson, 2012). Although ACT's approach is similar to my model, I identify three mediating processes between acceptance and emotion regulation flexibility that have not yet been empirically tested in the manner that I

propose in the Discussion. Functionally, through the three processes I identify, acceptance may break the link between an emotional experience on the one hand and the desire to change emotion and automatic emotion-focused responses to stressful stimuli on the other (Hadash, Segev, Tanay, Goldstein, & Bernstein, 2016). Notably, I am not proposing that acceptance is a magic bullet or a cure-all emotion regulation technique. In fact, I am proposing that acceptance could be compatible with the subsequent use of almost any other emotion regulation technique because acceptance helps us make more adaptive and less automatic choices when responding to emotion.

In the Section below, I provide a foundation for my proposed model by defining acceptance and its elements; highlighting evidence that acceptance influences well-being, including by enhancing emotion regulation flexibility; and identifying likely mechanisms for this effect. I will utilize the themes highlighted in this review to make a case for direct examination of the relationship between acceptance and emotion regulation flexibility, since none yet exists.

B. Definition and Dimensions of Acceptance

In much the same way that researchers have struggled to define mindfulness (see e.g., Baer et al., 2006; Hölzel et al., 2011; Brown & Ryan, 2004), there is no single agreed upon definition of acceptance. I approach acceptance in this paper primarily as a trait or habitual tendency as opposed to the lab-induced skill. People vary in the degree to which they accept their emotions or thoughts (Ford et al., 2018), and trait acceptance appears to include one or more as-yet undefined-beliefs about emotions that may play a role in generating positive outcomes (Ford & Gross, 2018). Trait acceptance has been studied primarily in cross-sectional studies examining the relationship between levels of the naturally occurring trait (as measured through one of several validated scales) and well-being related outcomes. This clarification is necessary

because, as highlighted in the Discussion, the definitions of acceptance used in experimental studies that manipulate acceptance (what I will refer to as *skill acceptance*) appear to differ from the trait discussed below in ways that may impact those studies' results.

Acceptance has generally been defined as a multi-dimensional construct. In fleshing out these dimensions, scholars pull heavily from conceptual frameworks of mindfulness (Baer et al., 2006) and clinical models that incorporate mindfulness and acceptance as core processes (Hayes et al., 2012; Segal et al., 2002). Four elements often appear in descriptions of acceptance: (a) willingness or openness, (b) to experiencing thoughts, emotions, or sensory experiences (what I will call psychological experiences), (c) without judgment, and/or (d) needlessly reacting to them (e.g. Hayes et al., 2006; Lindsay & Creswell, 2019; Shallcross et al., 2015; Troy et al., 2018). The subsections below will break down this definition into these four primary elements – the metacognitive stance, non-judgment, non-reactivity, and receptivity.

i. Metacognitive stance. The first element of acceptance is metacognitive stance. Metacognition is a term used to denote the relationship that one has to one's thoughts and feelings (Troy, Shallcross, Davis, et al., 2013). Acceptance is an orientation or relationship toward private psychological experiences like emotion, thoughts, and physical sensations. It has been described as a kind of "middle way" between suppression and avoidance of emotions and thoughts on the one hand and identification with or fixation on emotions and thoughts on the other hand (Lindsay et al., 2018, p. 946). The metacognitive stance of acceptance shares similarities with the process of decentering– taking a decentered or unidentified perspective on thoughts and emotions (i.e., thoughts are not the self and/or necessarily true; Hayes-Skelton & Graham, 2013). I will discuss the relationship between acceptance and decentering further in Section IV.C. One key point, discussed below, that helps explain how acceptance produces

adaptive responses to emotion is that the metacognitive stance of acceptance is not the same as apathy.

Distinguishing acceptance from apathy. The metacognitive stance of acceptance is a response to internal experiences, in contrast with more colloquial understandings of *acceptance* as something akin to apathy or passive resignation toward life situations (Singer & Dobson, 2007; Hayes et al., 2006; Young, 2016). Both contemplative literature and some empirical work emphasize this distinction. It appears to be easy to miss. Contemplatives have noted that a state of *inner* surrender or yieldedness supports decisive and effective action in the world (not apathy) (Bourgeault, 2003). And some have hypothesized acceptance frees up energy for responding to external situations - by disengaging from an inner struggle we can redirect our resources out into the world (Young, 2016). Researchers have made this distinction as well. Brown and Ryan (2015) posit that assuming an *observant stance* toward the contents of an individual's consciousness improves the quality of autonomous motivation, allowing the individual the opportunity to choose how to act (i.e., to act autonomously rather than reactively; Brown & Ryan, 2015). And, recent studies of acceptance have carefully distinguished acceptance of *emotions* from acceptance of *situations*, finding that only the former has a positive relationship with well-being (Ford et al., 2018). Researchers have suggested that this common error makes it difficult to measure acceptance in the affirmative (Baer et al., 2006). If, when people read the word *acceptance* or *accept* in a scale, they interpret it to mean apathy or resignation, this may influence their responses. To get around this problem, most scales of acceptance use reverse-scored items that inquire about an individual's tendency to judge, react to, or avoid emotions or thoughts (Baer et al., 2006; Hayes et al., 2004).

Clinical models that utilize mindfulness and/or acceptance as core processes, such as Mindfulness Based Cognitive Therapy (MBCT; Segal et al., 2002) and ACT (Hayes et al., 2012) also echo the distinction between inner acceptance and outer apathy. MBCT emphasizes a process of changing an individual's relationship to thoughts and emotions so as to loosen the connection between unhelpful or maladaptive thoughts and the emotions that arise from those thoughts (Segal et al., 2002). In ACT, acceptance is one of several core processes that support well-being through the development of psychological flexibility (Hayes et al., 2012). Acceptance is taught to increase an individual's ability to be in contact with what's really happening right now, reduce suffering, and the improve the ability to take committed action in pursuit of a valued life path (Hayes et al., 2006). Both of these approaches emphasize that acceptance works on inner experiences. And the ACT perspective indicates that acceptance actually facilitates the opposite of apathy – consciously chosen values-based action and living (Hayes et al., 2006) as opposed to living life on autopilot with the attendant risk of being carried away by emotional reactions.

ii. Non-judgment & non-reactivity. Taken together, non-judgment of emotions and thoughts and non-reactivity to emotions and thoughts comprise the essence of acceptance. Baer and colleagues (2006) posited that these two facets, when combined, effectively operationalize acceptance.

Non-judgment. Non-judgment is sometimes defined expressly, as in refraining from judgments about an experience, judgments of the self, or judgments of the quality of an experience ("I make judgments about whether my thoughts are good or bad"; Baer, Smith, & Allen, 2004). And sometimes it is described as an implicit element of receptivity, another characteristic of acceptance. Receptivity involves openness to psychological experience

regardless of valence – not making distinctions in one's willingness to encounter an experience on the basis of their perceived positivity or negativity (Lindsay & Creswell, 2019). Non-judgment, in the language of mindfulness, is about refraining from shooting oneself with the *second arrow* - the first arrow being a negative psychological experience, and the second arrow being the judgment that it is unwanted, negative, or bad (Young, 2016). Non-judgment may play a crucial role in reducing meta-emotions, one process that I propose mediates the relationship between acceptance and emotion regulation flexibility. Meta-emotions are, after all, sometimes described as the emotional outcome of an evaluation of the desirability of one's emotional experience (Ford & Mauss, 2014).

Non-reactivity. Non-reactivity, by contrast, refers to refraining from automatic or impulsive reactions to an experience ("I perceive my feelings and emotions without having to react to them"; Baer et al., 2006). As such, non-reactivity can be described as a behavioral pause. Non-reactivity is not the same as affective reactivity, a construct sometimes used in emotion regulation research. Affective reactivity is expressed as the peak amplitude of an emotional response and this value is used to measure the degree of emotional responding (Davidson, 1998; Ostafin, Brooks, & Laitem, 2014). Researchers have hypothesized that non-reactivity helps negative emotions run their course and terminate, particularly when accessed within the calm, relaxed and attentive state of mindfulness (Bränström & Duncan, 2014).

It is worth noting that not all studies of acceptance operationalize acceptance as including non-reactivity – sometimes acceptance is operationalized as non-judgment alone (e.g., Ford et al., 2018; Shallcross et al., 2012). This may be because these studies measured affective reactivity (i.e., the intensity of emotions in response to stimuli) as an outcome of acceptance and incorporating non-reactivity as a measure of trait acceptance might have confused the study's

results. Although non-reactivity (refraining from automatic reactions) and affective reactivity (degree of emotional responding) are can be distinguished, it is also plausible that they are related or overlap.

It may be that non-reactivity plays a role in reducing the automatic activation of hedonic emotion goals (i.e., a goal to feel less negatively or more positively) and lowering emotional interference by decreasing the amount of cognitive resources dedicated to emotion-repair. Lindsay and colleagues (2018) posit that practicing non-reactivity may "retrain habitual reactivity to affective stimuli in the environment" (p. 966), an idea echoed by researchers who compare acceptance processes to exposure therapy and extinction, discussed further in Section II.C (Hölzel et al., 2011; Uusberg, Uusberg, Talpsep, & Paaver, 2016). I do not know of any research that directly tests these questions.

Equanimity. The two facets of non-judgment and non-reactivity are sometimes expressed as the two-factor construct of equanimity (Hadash et al., 2016). Equanimity is defined as a balanced internal state from which a person is able to contact their experience without suppression or avoidance (in the Buddhist literature, aversion), and without identification or fixation (in the Buddhist literature, craving; Desbordes et al., 2015; Young, 2016). Functionally, non-judgment and non-reactivity combine in equanimity, giving rise to a "decoupling of desire (wanting and not wanting) from the hedonic tone of current or anticipated experience (pleasant and unpleasant"; Hadash et al., 2016, p. 1215). In other words, in a state of equanimity an individual's desires are not directed toward changing or striving for a particular feeling state. Instead, individual desire is directed to "values, long term goals, and prosocial intentions" (Hadash et al., 2016, p. 1215). Equanimity is hypothesized to be a key outcome measure of mindfulness interventions (Desbordes et al., 2015), though there is some evidence that it is not

automatically cultivated without instruction in the acceptance/non-judgment elements of mindfulness (Hadash et al., 2016; Lindsay et al., 2018).

iii. Receptivity. The final facet of acceptance conveys a sense of voluntary engagement with psychological experience and is variously described as receptivity, willingness, or openness to experience (Campbell-Sills et al., 2006; Hayes et al., 2012; Lindsay & Creswell, 2019). This willingness to feel the feeling, think the thought, experience the sensation is the opposite process from experiential avoidance/suppression. Hayes, Strosahl and Wilson (2012), the founders of ACT, describe receptivity as the *behavioral willingness* facet of acceptance or "the voluntary and values-based choice to enable or sustain contact with private experiences or the events that occasion them" (Hayes et al., 2012, p. 77). Hayes and colleagues make the point that low receptivity to experience eventually works against us because it narrows our experience of our lives (Hayes et al., 2012). In other words, if we are unwilling to experience discomfort, we limit our opportunities to flourish.

B. Benefits of Acceptance

Further exploration and understanding of acceptance as an emotion regulation strategy is warranted given the considerable evidence that it contributes to well-being. Of course, as discussed above, no single strategy for responding to emotion or corresponding thoughts is considered universally helpful or adaptive; rather, adaptiveness largely depends on context (Bonanno & Burton, 2013). Even so, as noted above, research reflects that the suppression of negative emotions often is maladaptive—regardless of context.[1] For example, certain kinds of unhealthful behaviors, such as substance abuse, often are described as maladaptive attempts to avoid or dampen negative emotions (e.g., Berking et al., 2011). Additionally, some researchers

[1] One commonly cited example of adaptive suppression or avoidance is that of a doctor or other emergency worker suppressing their emotions to treat a patient or respond to an emergency (Hayes et al., 2012).

have proposed that unregulated emotion or dysfunctional attempts to regulate or avoid emotion are at the core of mood and anxiety disorders (Hofmann et al., 2012; Kashdan et al., 2006). Even procrastination is related to avoiding the experience of negative emotion (Sirois & Pychyl, 2013). On the other hand, as discussed below, significant evidence reflects that the alternative strategy of acceptance of negative emotions contributes to well-being.

i. Impact on negative outcomes. Much of the research on acceptance focuses on how trait acceptance interacts with levels of psychopathology, negative emotion, and/or general psychological distress. In one review of 28 largely correlational studies, Chawla and Ostafin (2007) found that although there are some inconsistencies in the literature examining trait acceptance (measured, in this case, as low experiential avoidance), there was evidence that it is related to lower rates of psychopathologies including substance use relapse and lower rates of psychological distress in response to trauma. In contrast, experiential avoidance, has been described as a general tendency associated with anxiety disorders (Kashdan et al., 2006).

Another series of studies indicates that acceptance somehow buffers individuals from some of the negative impacts of stress and stressful life events. Several studies, using a variety of measures of acceptance, have assessed the impact of acceptance by either (a) exposing participants to a stressful or negatively-valenced stimulus in the lab and then measuring participant responses (e.g., emotional, physiological, or neurological; e.g., Feldner, Zvolensky, Eifert, & Spira, 2003; Karekla, Forsyth, & Kelly, 2004; Shallcross et al., 2010), or (b) measuring stressful life events and related outcomes longitudinally or through daily diary assessments (e.g., Shallcross et al., 2012; Ford et al., 2018). Participants high in acceptance experienced lower levels of negative emotions during stressful laboratory tasks (Feldner et al., 2003; Karekla et al., 2004; Ostafin et al., 2014; Shallcross et al., 2010; Shallcross et al., 2012), lower levels of

negative emotions in daily life (Shallcross et al., 2012), and lower levels of negative emotions in response to stressful life events (Ford et al., 2018). Several studies have indicated that lower levels of negative emotions (i.e., affective reactivity) experienced by individuals high in acceptance may partially account for lower levels of negative outcomes, such as lower levels of anxiety (Ostafin et al., 2014), psychological distress (Coffey & Hartman, 2008); and sad moods in response to common stressors (Feldman et al., 2016). And, in the Chawla and Ostafin (2007) meta-analysis, acceptance also mediated the relationship between the use of maladaptive self-regulation strategies and psychological distress (Chawla & Ostafin, 2007). In combination, these findings suggesting acceptance plays a role in adaptive emotion regulation flexibility in response to stress. These findings are bolstered by evidence, surveyed in the next section, that acceptance improves positive outcomes and facilitates other emotion regulation strategies.

ii. Impact on positive outcomes. Relatively fewer studies, compared to the above, have directly examined the impact of trait acceptance on positive states such as levels of positive emotion and well-being. However, evidence indicates that acceptance is generally associated with higher levels well-being (Baer et al., 2008; Ford et al., 2018), more daily positive events and fewer negative events (Kashdan et al., 2006), and higher satisfaction with life (Ford et al., 2018). Clinical intervention studies show that acceptance instruction has a positive impact on long-term resilience, particularly for individuals with elevated levels of psychopathology (Ma & Teasdale, 2004; Twohig et al., 2010).

Further, while there is consistent evidence that acceptance decreases negative emotion in response to stress, it does not appear to change levels of positive emotions in response to stress (Ford et al., 2018). If, as this finding suggests, acceptance does not deflate positive emotions, but does reduce negative emotions, acceptance may have the laudable effect of increasing the ratio

of positive to negative emotions that individuals experience during stressful life events – an effect linked to well-being (Fredrickson, 2013). And a recent mindfulness intervention study isolated acceptance as key process that facilitates increased positive emotions as an outcome of mindfulness practices (Lindsay et al., 2018). Collectively, these studies indicate that acceptance is related to factors that enhance well-being.

iii. Impact on emotion regulation strategies. Thus far, we have seen that acceptance is related to lower negative emotions in response to stress, fewer negative outcomes, and higher well-being. Studies have also indicated that acceptance is related to more effective use of other emotion regulation strategies (Kashdan, 2006; Kivity, Tamir, & Huppert, 2016). And at least one study indicates a positive relationship between acceptance and individuals' perceived ability to regulate emotion (Coffey & Hartman, 2008).

Several studies have specifically examined the relationship between acceptance and the emotion regulation strategy of reappraisal. In a review, Shallcross et al., (2015) suggests that acceptance renders subsequent emotion regulation through reappraisal more effective or efficient by first facilitating receptive broadening of attention and decentering (Shallcross et al., 2015). This theory has some empirical support. One study found that higher levels of trait mindfulness (including acceptance) and decentering, a process that is associated with acceptance, were both related to higher reappraisal ability (Hayes-Skelton & Graham, 2013). Decentering partially mediated the relationship between mindfulness better reappraisal ability (Hayes-Skelton & Graham, 2013). And individuals with a history of MBCT – which emphasizes acceptance – demonstrate significantly higher reappraisal ability compared to those who received traditional CBT or no-therapy (Troy, Shallcross, Davis, et al., 2013). Troy, Shallcross, Davis, and Mauss (2013) hypothesized that the clinical guidance to accept thoughts and feelings may be facilitating

reappraisal by shifting how participants related to their thoughts (Troy, Shallcross, Davis, et al., 2013). In other words, when used before reappraisal, acceptance may facilitate a more effective reinterpretation of emotional experience and matching regulation to context (i.e. flexibility).

iv. Mixed results in experimental studies of acceptance. Although non-experimental studies that measure naturally-occurring trait acceptance levels fairly consistently find links between acceptance and factors related to better psychological health, experimental studies that manipulate acceptance have produced mixed results. For example, one 2012 meta-analysis of experimental studies found no consistent effects of acceptance and no reliable impacts on levels of the subjective experience of negative emotion (Kohl et al., 2012).

There are a few possible explanations for this effect. First, participants in non-experimental studies who rate themselves high in the skill of acceptance may use acceptance as an emotion regulation strategy in their daily lives in a fundamentally different way from participants in experimental studies who receive an instruction to use acceptance in response to an artificial laboratory task designed to induce stress or negative emotion. Second, in many of these experimental studies, researchers did not try to manipulate participants' underlying beliefs about their emotion and, as I have previously suggested, it may be that individuals' high in trait acceptance demonstrate a natural tendency toward an as-yet undefined set of beliefs about emotions that impact outcomes.

This point is illustrated by comparing the scales used to measure trait acceptance with instructions used to manipulate acceptance in experimental studies. For example, the non-judge subscale of the Five Facet Mindfulness Questionnaire, often used as a stand-alone measure of trait acceptance (e.g., Ford et al., 2018; Shallcross, Ford, Floerke, & Mauss, 2012) includes the items "I think some of my emotions are bad or inappropriate and I shouldn't feel them" and "I

criticize myself for having irrational or inappropriate emotions" (Baer et al., 2006). Both of these items appear to measure a type of cognitive skill or response to emotion (e.g., judgment and criticism) and beliefs or mindsets (some emotions are bad, irrational or in appropriate), to varying degrees. In some ways, these items illustrate the difficulty of separating beliefs from cognitive processes or skills like acceptance. Beliefs about emotion (e.g., emotions are good vs. bad, emotions are controllable vs. uncontrollable) appear to broadly influence emotion regulation, but they are also distinguishable from the skills or actual regulatory efforts employed by individuals to regulate their own or others' emotions (Ford & Gross, 2018).

In contrast, when experimental studies have manipulated acceptance to test its effectiveness as an emotion regulation skill, researchers have often employed brief instruction that do not target participants' underlying beliefs about emotion. For example, the following instructions were used by Dan-Glauser et al. (2015) in a study comparing the effects of acceptance with suppression using a within-subjects design:

> When you see the instruction "ACCEPT", we would like you to try your best to accept your emotions and experience them fully. We want you to allow yourself to stay with your emotions. Do not avoid them and do not try to control or change your emotions in any way. Refrain from attempts to distract yourself or otherwise lessen or amplify your feelings, and instead allow yourself to feel your emotions and observe carefully the modifications that these emotions trigger within you. (p. 4)

Some studies have used instructions that may be read as influencing beliefs about emotion, such as Hofmann, Heering, Sawyer, and Aasnaani (2009) where the phrase "It is quite normal that an impromptu speech creates some level of discomfort or even fear," was offered to participants in each of the reappraisal, suppression and acceptance conditions (p. 4). But, as with other studies,

the substantive instructions for acceptance used in Hoffman et al. (2009) describe a mental strategy for approaching current emotional experience, but do not encourage a positive or even neutral belief about emotions generally that may aid the acceptance process:

> Please try to experience your feelings fully and do not try to control or change them in any way. Nevertheless, please let your feelings run their natural course and allow yourself to stay with your emotions, as fully as possible, without trying to control your feelings in any way. (p. 4)

It is possible that the use of instructions that do not target beliefs helps explain why experimental studies that manipulate acceptance obtain different findings than studies that test trait acceptance. But it does not explain why experimental studies that manipulate acceptance so frequently contradict each other. In order to illustrate other possibilities that may cause such inconsistencies, I will briefly review some trends and contradictions in studies that manipulate acceptance.

The first trend in studies that experimentally manipulate acceptance is the finding that acceptance is not as effective as other emotion regulation techniques – reappraisal in particular – at decreasing the intensity of subjective experience of negative emotion during stressful or negative laboratory tasks (Campbell-Sills et al., 2006; Troy et al., 2018). However, acceptance does appear to have some effects that arise at a later time in the experiments or that manifest in a different way than emotional intensity. For example, experimental studies have found that acceptance led to reduced *physical symptoms* of negative emotion and stress during laboratory tasks in comparison to other regulation methods (Hofmann et al., 2009; Troy et al., 2018), reduced intensity of negative moods, and reduces negative attitudes toward temporary negative experiences (Singer & Dobson, 2007). Another study found that while acceptance did not

decrease the subjective (felt) intensity of emotions *during* a lab task, participants in the acceptance condition more readily returned to their emotional baseline, experiencing fewer negative emotions in the aftermath of the task (Campbell-Sills et al., 2006).

Further, variation in methods and contradictory findings in the experimental studies of acceptance make their results difficult to interpret. Take, for example, a pair of studies comparing acceptance to suppression. One study found that acceptance led to less subjective anxiety during a lab task (i.e., inhalation of carbon-dioxide enriched air, which produces distress) and more willingness to participate in a second task as compared with the suppression group (Levitt, Brown, Orsillo, & Barlow, 2004). However, Levitt, Brown, Orsillo, and Barlow (2004) recorded no difference in physiological symptoms in response to the task (i.e., heart rate and skin temperature) between the two regulation techniques (Levitt et al., 2004). In contrast, Dan-Glauser & Gross (2015), used a different laboratory task (i.e., viewing negative images) and found that when compared with suppression, acceptance *did not* reduce the subjective experience of negative emotion in response to the task. But, acceptance did but did dampen heart rate and blood pressure changes in comparison with suppression (Dan-Glauser & Gross, 2015).

Several factors might explain these variations. First, these studies use a range of different emotion and/or stress-induction techniques (from videos to images to carbon-dioxide inhalation) and different acceptance instructions. Second, participants in the experimental studies may have had different levels of naturally-occurring trait acceptance, and such variation may impact the studies' outcomes. Some studies statistically controlled for variation in trait acceptance (Wolgast, Lund, & Viborg, 2011) or by using a within-subjects design (Troy et al., 2018), but many do not (e.g. Dan-Glauser & Gross, 2015; Campbell-Sills et al., 2006). Finally, it may be that acceptance's primary effect on emotion regulation cannot be captured when it is used in

isolation or when it is measured solely through subjective emotional intensity *during* a stressful task – it may be that acceptance facilitates adaptive emotion regulation flexibility by facilitating the use of other regulatory strategies concurrently or subsequently.

C. Mechanisms Through Which Acceptance Impacts Regulatory Flexibility and Well-Being

In the prior section, I introduced the empirical evidence indicating that acceptance is related to higher well-being, lower negative emotions in response to stress, fewer negative outcomes such as psychopathology and anxiety, and more efficient and effective use of other emotion regulation strategies. I also highlighted how several of these findings indicate that acceptance may be facilitating the flexible regulation of emotion. In this section, I will review research that illustrates the mix of conscious and unconscious mechanisms that may contribute to these outcomes. These mechanisms help illuminate the processes by which acceptance has these beneficial effects, including indications of where researchers should look next to directly test the relationship between acceptance and adaptive emotion regulation flexibility.

Emotion regulation processes exist on a spectrum from explicit (i.e., deliberate and/or effortful) to implicit (i.e., non-conscious and/or automatic; Gyurak & Etkin, 2014). Research on trait acceptance highlights both types of mechanisms. Said another way, the benefits of acceptance manifest in two ways – conscious and intentional processes, and in automatic or non-conscious processes (Hadash et al., 2016). Much research highlights the mechanisms by which acceptance reduces negative affective reactivity (i.e., the intensity of negative emotions) in response to stress, which is hypothesized to lead to positive outcomes like lower psychopathology (Kashdan et al., 2006), and improved well-being (Ford et al., 2018). I will also highlight how these mechanisms may improve an individuals' ability to implement a variety of

emotion regulation strategies in a contextually sensitive way, leading to greater emotion regulation flexibility (Bonanno & Burton, 2013).

i. Explicit regulatory mechanisms of acceptance. It has been hypothesized that when individuals accept emotions and related thoughts, they reduce other reactions to them, permitting the emotions and thoughts to end and diffuse more quickly (e.g., Campbell-Sills et al., 2006; Ford et al., 2018; Singer & Dobson, 2007). It may be that the intentional and effortful process of acceptance reduces the incidence of meta-emotions, rumination, and evaluative thought, which are discussed further below. Theoretical work (Shallcross et al., 2015) and some preliminary empirical studies (e.g., Ciesla et al., 2012; Mitmansgruber, Beck, Höfer, & Schüßler, 2009; Low, Stanton, & Bower, 2008) point to reduced meta-emotion, rumination, and evaluative thought (i.e., judgmental thought about thoughts and emotions) mechanisms by which acceptance may reduce the intensity of negative emotions. Rumination and judgmental thought are forms of negative self-referential processing (Mennin & Fresco, 2013). Both can give rise to prolonged negative mental states, including meta-emotions, and contribute to psychopathology (e.g., Olatunji, Naragon-Gainey, & Wolitzky-Taylor, 2013; Mennin & Fresco, 2013). By consciously accepting emotions and thoughts, individuals may cut off or intentionally refrain from these other, often unhelpful, ways of responding to negative emotions, thereby reducing their intensity or length (Ford et al., 2018).

Rumination and evaluative thought. Rumination and evaluative thought appear to be directly impacted by acceptance. Writing in an accepting manner has different effects on physiological responses to stress than does evaluative (judgmental) writing, leading to more efficient heart rate habituation and recovery (Low et al., 2008). Rumination involves repetitive thinking about one's emotions or problems, and *emotion-driven* rumination, i.e., rumination that

arises in response to certain emotional states and is focused on the undesirable internal experience of emotion, is associated with symptoms of depression and anxiety (Olatunji et al., 2013). It is intuitive that consciously accepting emotions would cut off emotion-driven rumination, and one study did find less rumination among adolescents high in acceptance (Ciesla et al., 2012). These researchers also found that lower levels of rumination partially accounted for lower levels of depressed mood in response to stress experienced by adolescents who were high in acceptance (Ciesla et al., 2012). Other research has also pointed to a relationship between acceptance (measured as non-attachment), lower levels of rumination and lower levels of psychological distress (Coffey & Hartman, 2008). Although these studies provide preliminary empirical support connecting acceptance with less rumination and evaluative thought, they examine acceptance as a facet of mindfulness, not a stand-alone construct. Further work is needed to clarify these findings.

Meta-emotions. Acceptance may also reduce meta-emotion. This may be because acceptance involves forming a neutral or non-judgmental evaluation or interpretation of one's emotional experience (Hofmann et al., 2009), and meta-emotions are sometimes described as the result of an individuals' evaluation of emotion regulation efforts (Ford & Mauss, 2014). Meta-emotions are emotions that follow primary emotions in time and also generally refer to other emotions as their object (i.e., they are emotions about emotions; Mitmansgruber et al., 2009). Since emotions are themselves evaluative (e.g., Suri & Gross, 2016), emotions about emotions should increase the intensity and complexity of their felt experience. Some evidence indicates that meta-emotions have significant influence on psychological well-being over and above acceptance (measured as low experiential avoidance) and indicate that meta-emotions play a role in the benefits of acceptance (Mitmansgruber et al., 2009). But the evidence consists of only one

cross-sectional study which does not fully flesh out the relationship between acceptance and meta-emotions (Mitmansgruber et al., 2009). Further research is needed to understand how acceptance might reduce meta-emotions.

Decentering. As reviewed above, it appears that the explicit and deliberate process of taking an accepting and non-judgmental perspective on thoughts and experiences may cut off evaluative and ruminative thought and prevent meta-emotions. Acceptance may also facilitate the process of decentering. Decentering is often described as either a core process or outcome of acceptance (Lindsay & Creswell, 2019; Shallcross et al., 2015). And it is a common theme in mindfulness and acceptance literature (e.g., Garland et al., 2011; Hayes et al., 2012; Hayes-Skelton & Graham, 2013; Segal et al., 2002). Decentering is defined as the process of stepping back or disengaging from thoughts and emotions, viewing them as mental experiences that arise and pass away instead of identifying them with the self or viewing them as permanent or necessarily accurate reflections of reality (Hayes-Skelton & Graham, 2013; Segal et al., 2002). Like acceptance, decentering is a cognitive process that also has elements of a belief or mindset (i.e., the belief that thoughts and emotions are not the self, or the belief that they are merely information).

Decentering may be a key process that facilitates emotion regulation. Decentering from an initially aversive appraisal, such as a stress response or a negative emotional response, may prevent further escalation of ruminative processing (Segal et al., 2002) and some evidence indicates that decentering facilities subsequent positive reappraisals (Garland et al., 2011). And acceptance researchers identify the decentering effect of acceptance as the mechanism that makes acceptance an ideal precursor to reappraisal (Shallcross et al., 2015). Researchers have also connected decentering with the related process of self-distancing (Ayduk & Kross, 2010;

Bränström & Duncan, 2014), which has been shown to facilitate emotionally *cool* processing of negative emotions without rumination or increased negativity (Kross, Ayduk, & Mischel, 2005). I suspect that decentering is a core feature of trait acceptance, arising from the metacognitive stance of acceptance. I do not know of any research that directly supports this proposition, though empirical work points to decentering as key to mindfulness' benefits (Garland et al., 2011; Hayes-Skelton & Graham, 2013).

How the explicit regulatory mechanisms of acceptance contribute to emotion regulation flexibility. As discussed above, rumination, evaluative thought and meta-emotions can all be framed as reactions to emotions that have a tendency to increase their intensity. Conscious acceptance of emotions, and the related process of decentering, may be a more adaptive first response to negative emotions that does not escalate emotional intensity and improves adaptive emotion regulation flexibility. This view is consistent with the emerging field of emotion polyregulation, that proposes that individuals typically use more than one regulatory strategy in response to any emotional episode, sometimes sequentially and sometimes simultaneously (Ford et al., 2019) By reducing the incidence of rumination, evaluative thought, and meta-emotion and facilitating decentering and/or self-distancing (Bränström & Duncan, 2014), acceptance may broaden awareness (Garland et al., 2011) improving sensitivity to context and environmental feedback – key elements of flexibility (Bonanno & Burton, 2013). Subsequently, from the decentered or self-distanced metacognitive stance of acceptance, the individual may be better prepared to discern and utilize an adaptive response to the emotional stimulus, whether that response is reappraisal (Shallcross et al., 2015; Garland et al., 2011), some other emotion regulation strategy (Kashdan et al., 2006; Kivity et al., 2016), or to take other action to influence a controllable situation (Troy et al., 2013). I am not aware of any research that

has directly tested the impact of acceptance as a *first response* to emotion on psychological health or on subsequent emotion regulation flexibility. This will be an important avenue for future research as it may help further illuminate how acceptance improves well-being.

ii. Implicit regulatory mechanisms of acceptance. There is evidence that acceptance's impact on psychological health is not mediated by individuals' ability to intentionally change their emotional experience (Berking et al., 2012; Radkovsky, McArdle, Bockting, & Berking, 2014). This indicates that, in addition to the explicit mechanisms discussed above, there may unconscious or implicit regulatory mechanisms driving the benefits of acceptance. Implicit emotion regulation is more automatic and can occur without a conscious goal of regulating emotion (Gyurak & Etkin, 2014). In a review of the neurobiological mechanisms at work in both implicit and explicit emotion regulation, Gyurak and Etkin (2014) identify several emotion regulation processes which have implicit characteristics, including emotional conflict or interference, extinction and habituation (Gyurak & Etkin, 2014). There is preliminary evidence that acceptance reduces emotional interference, indicating that implicit processes are at work (Ortner, Kilner, & Zelazo, 2007), and several researchers have noted the parallels between acceptance and exposure therapy aimed at eventual extinction of an unhelpful negative response to stimuli (Hölzel et al., 2011; Uusberg et al., 2016). Together, these findings suggest that trait acceptance may be operating at least partially through implicit regulatory channels. These findings might also help illuminate why the skill of acceptance is judged less cognitively costly or difficult to employ than other emotion regulation strategies (Troy et al., 2018) – the regulation is happening in the background. I will review the limited research on the implicit mechanisms of acceptance below, and also highlight how they may be contributing to emotion regulation flexibility.

Emotional interference. Emotion conflict or interference refers to an unconscious process of regulating emotional responses to emotion-laden stimuli in order to support task performance (Gyurak & Etkin, 2014). In a standard task, a participant might be shown an emotionally expressive face (e.g., frowning) superimposed with a congruent (e.g., sad) or incongruent (e.g., happy) phrase and be required to press a button to indicate the nature of the facial expression (Gyurak & Etkin, 2014). The ability to complete this task is diminished in individuals with anxiety and depression (see e.g., Etkin, Egner, & Kalisch, 2011; Etkin, Prater, Hoeft, Menon, & Schatzberg, 2010; Gyurak & Etkin, 2014).

A study by Ortner et al. (2007) offers preliminary evidence that acceptance may reduce interference and facilitate task performance. In this study, researchers showed participants images that were either arousing (i.e., pleasant or unpleasant) or neutral and subsequently played a high- or low-pitched tone that participants were asked to rate as high or low by pressing a button. Researchers measured interference as participants' response times to the tone. Participants with a history of meditation and higher scores on a measure of mindfulness that includes acceptance and openness to experience (the Toronto Mindfulness Scale) performed the task with reduced interference for unpleasant images. Interestingly, researchers found no significant correlation between task performance and high scores on a different measure of mindfulness that does not evaluate acceptance.

These researchers also conducted a randomized controlled trial to test the impact of a 7-week mindfulness intervention on emotional interference. The intervention included explicit instruction on non-judgment, acceptance and the "adoption of a non-judgmental stance, recognizing that thoughts and emotions are not the self" (Ortner et al., 2007, p. 277). They found that participants in the mindfulness training group were able to disengage attention from negative

stimuli and perform the task more efficiently than the group that received only relaxation training.

The Ortner et al. (2007) study has interesting parallels to findings by Garland et al. (2011) that decentering or disengaging from an initially negative appraisal of a stressful situation facilitates broadened awareness of context. More research is needed to specifically test acceptance and its impact on emotional interference, but it may be that reductions in interference better enable individuals to refocus on meaningful goals in the face of emotional stimuli, facilitating adaptive emotion regulation flexibility.

Extinction or habituation. Some researchers have suggested that acceptance changes how we respond to emotional stimuli through a process of habituation, whereby repeated intentional non-reactivity to negative emotional stimuli eventually becomes more and more automatic (Hadash, et al., 2016; Lindsay, et al., 2018). And several researchers have noted the similarity between acceptance on the one hand, particularly in the context of mindfulness interventions, and extinction through exposure therapy on the other. Extinction is a learning process that involves repeated exposure to a harmless stimulus (e.g., an email notification) which, through experience or other learning, has previously been associated with an aversive stimulus (e.g., sharp criticism from one's supervisor) and which elicits a defensive response (Gyurak & Etkin, 2014). Over time, through repeated exposures to the harmless stimulus without the aversive one, a new memory is formed that inhibits the defensive response (Gyurak & Etkin, 2014). This process has been leveraged in clinical settings to reduce psychological distress, sometimes in conjunction with mindfulness interventions (Kumar, Feldman, & Hayes, 2008)

Holzel et al. (2011) posits that the process of willingly bringing acceptance and non-reactivity to physical and emotional experiences without avoidance or other safety behaviors

(i.e., behaviors undertaken to escape perceived threat) mirrors the processes used by exposure therapy to extinguish fear or anxiety responses to negative stimuli. It is possible that the disciplined attention and relaxed and open awareness facilitated by mindfulness meditation may be key elements that facilitate this effect.

However, it also appears that even brief mindfulness instruction that includes acceptance may have this effect. In one study that sought to examine this mechanism, a brief mindfulness instruction was given which expressly included acceptance instructions: "Pay attention to all arising thoughts, feelings and bodily sensations in an accepting manner without trying to change them" (Uusberg et al., 2016, p. 97). The instruction was provided to participants in advance of exposure to negative stimuli. Emotional responses to the stimulus was measured through Late Positive Potential (LPP) amplification, which is a pattern of electrical firing in the brain measured through electroencephalogram (EEG) that is related to intensity of emotional response (Uusberg et al., 2016). Although participants in the mindfulness (i.e., accept) condition initially experienced increased LPP to the stimulus (vs. those in a control condition), subsequent exposures reduced and eventually eliminated LPP amplification (Uusberg et al., 2016). This effect was not observed in the control condition. This finding indicates that acceptance may eventually diminish or eliminate negative emotional responses to stimuli that prove to be non-threatening. But more research is needed to confirm this and to determine whether acceptance can have this effect when isolated from mindfulness meditation.

How the implicit regulatory mechanisms of acceptance contribute to emotion regulation flexibility. Findings that acceptance may facilitate task performance by reducing emotional interference and that it may help reduce or extinguish unnecessary negative emotional responses both indicate that acceptance may improve individuals' ability to make conscious

choices about behavior in the face of emotional episodes. Adaptive motion regulation flexibility has been described as co-variation between regulatory strategy use and shifts in context in service of personally meaningful goals (Aldao et al., 2015). If acceptance improves individuals' ability to remain focused on personally meaningful goals even when emotional episodes arise, whether because they are more tolerant of stimuli (Uusberg et al., 2016) or because they have more access to their task-focused cognitive resources (Ortner et al., 2007), they may be better able to choose how to regulate their emotions – or whether to regulate at all – in a way that supports goal attainment.

V. Discussion

As discussed in the literature review above, acceptance is associated with well-being-related outcomes, including reduced depression symptoms (Singer & Dobson, 2007), lower levels of negative emotion in response to stress (Feldner et al., 2003; Ford et al., 2018; Karekla et al., 2004; Ostafin et al., 2014; Shallcross et al., 2010; Shallcross et al., 2012), improved psychological well-being (Ford et al., 2018), and more effective use of emotion regulation strategies (Kashdan et al., 2006; Kivity et al., 2016). I have also reviewed evidence that indicates that emotion regulation flexibility, more so than any one particular regulatory strategy, may be key for psychological health (Bonanno & Burton, 2013; Kashdan & Rottenberg, 2010), particularly when flexibility facilitates progress toward meaningful goals (Aldao et al., 2015; Hayes et al., 2012). And I have also highlighted themes in the research and other indications that acceptance may be a useful first response to emotions that facilitates adaptive emotion regulation flexibility, though I am not aware of any studies that have directly tested the impact of acceptance on subsequent regulation. More research is needed on these important topics. In this section, I will propose pathways for future research that (a) explores the relationship between

acceptance and emotion regulation flexibility (including a new conceptual model), (b) addresses gaps in the research literature on acceptance, and (c) addresses gaps in positive psychology's treatment of emotion regulation.

A. A Model of the Relationship Between Acceptance and Emotion Regulation Flexibility

This section will outline a framework for further research on the relationship between acceptance and emotion regulation flexibility and well-being. This framework is not intended to propose that acceptance is the end-all be-all of emotion regulation strategies. Instead, I am proposing that acceptance is an adaptive first response to emotion, a perspective that aligns with emerging evidence that individuals often utilize polyregulation, employing multiple strategies sequentially or simultaneously (Ford et al., 2019).

The research literature review reflected gaps in research on the relationship between acceptance and emotion regulation flexibility. I suggest three mediating processes that facilitate the relationship between acceptance and emotion regulation flexibility and that warrant further exploration, including (a) reductions or delays in automatic activation of emotion goals in response to stressful or negative emotion inducing stimuli, (a) lower levels of negative meta-emotions, and (c) reduced emotional interference. In combination, these three outcomes may facilitate more adaptive matching of regulation to context in service of meaningful goal pursuit. Functionally, they may break the link between an emotional experience on the one hand and automatic emotion-focused behavioral responding to stressful stimuli on the other (Hadash et al., 2016), facilitating broadened awareness and regulatory choices that are more aligned with meaningful goals (Garland et al., 2011). A model of this proposed mediation structure is presented below in Figure 1.

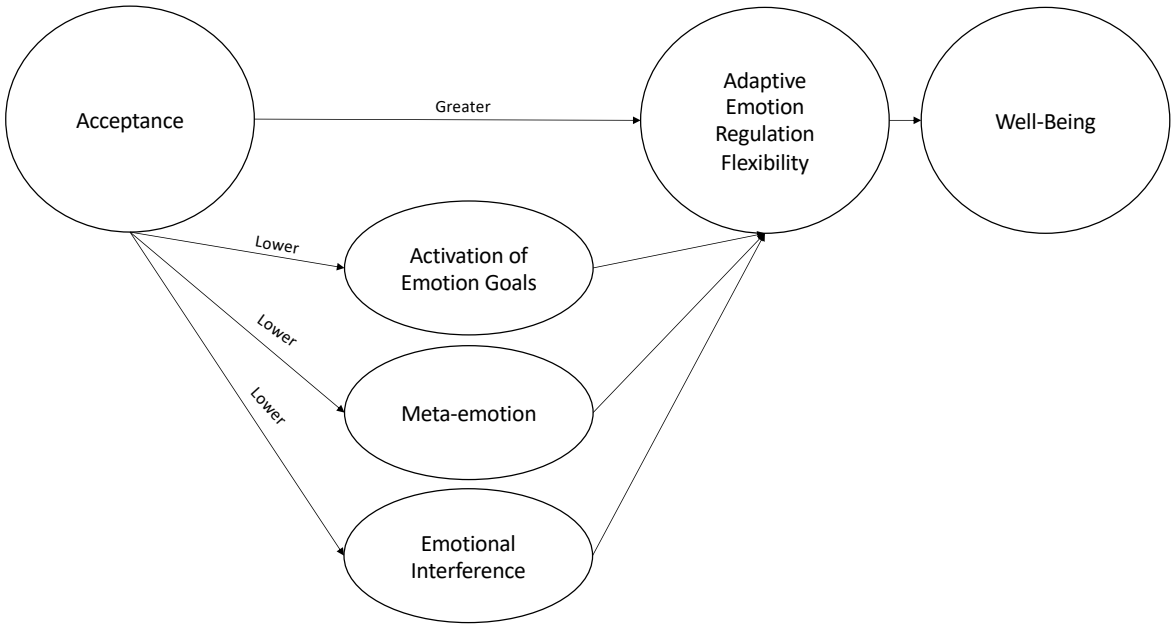

Figure 1. Accept-Flex Conceptual Model

My hypothesis about the role of these three mediators is largely informed by the ACT clinical model of psychological flexibility that indicates that certain flexibility processes, including acceptance, facilitate psychological health (Hayes et al., 2012). In other words, I propose that well-being is improved by promoting emotion regulation flexibility through an accepting stance of present-moment emotional experience (i.e., less activation of higher order emotion goals) and reallocating cognitive resources and behavior away from avoiding or controlling unpleasant emotion (i.e., less meta-emotion) and toward values-aligned goals and action in support of those goals (i.e., less emotional interference). Implicit in my hypothesis is the assumption that emotion regulation need not always serve hedonic aims (i.e., feeling better or

more positively) to be considered effective or successful. Most studies of emotion regulation measure the effectiveness of strategies through self-reported emotional experience (Webb, 2012). New and creative measurement techniques and study designs may be required to test for successful flexible regulation of emotion.

i. Emotion goals. As noted above, Ford et al. (2018) observed that even though acceptance works on emotional experiences, it does not fit easily within current models of emotion regulation. A *defining feature* of emotion regulation is the activation of an emotion goal (Gross, 2015). Emotion goals are generally defined as mental representations of emotional states that are a desired endpoint or outcome (Mauss & Tamir, 2014). They are the motivational aspect of the emotion regulation process. Acceptance is a strategy that expressly involves *not* setting a goal to change emotional experience. But, it is not clear that acceptance precludes any and all emotion goals. Mauss and Tamir (2014) suggest that acceptance may involve setting emotion goals that are more realistic (i.e., a goal to feel the current feeling; Mauss & Tamir, 2014). Having unrealistic emotion goals, such as a goal to experience a high level of happiness, has been associated with less positive emotion, a higher likelihood of being diagnosed with depression, and with increased meta-emotion (i.e., disappointment that results from failing to achieve one's emotion goal; for a review, see Ford & Mauss, 2014). But what if there is something else at work here? Acceptance is sometimes described as a mechanism that severs the link between salient stressful stimuli and the degree of emotional responding (e.g., Hadash et al., 2016; Feldman et al., 2016). Theoretically, acceptance is believed to break or diminish a motivational link between the hedonic tone of experience and the desire to change it, reducing both attachment (i.e., desire or wanting) and aversion (i.e., not wanting; Hadash et al., 2016). It may be that individuals who demonstrate high trait acceptance activate or respond to emotion

goals in a different way. They may experience less frequent automatic activation of emotion-goals in response to stressors. Or, such individuals may consciously activate emotion goals later in the emotion regulation process. Either of these possibilities could results in less activation of unrealistic or contextually insensitive emotion goals.

Emotion goals have been described as desired emotional states, and emotion regulation involves pursuit of these goals service of certain higher order motivations (which may be emotional or not; Tamir, 2016). Structurally, emotion goals operate within the broader goal system, with some goals relating to desired affect or emotion, and some relating to other purposes (e.g., to win an argument; Mauss & Tamir, 2014). Recently, Tamir, Halperin, Poraat, Bigman, and Hasson (2019) demonstrated that simply activating a goal to reduce negative emotions is sufficient to trigger automatic emotion regulation. Participants who were simply told to reduce their negative emotions were as effective at doing so as were participants who were told to do so *and* given instructions in a regulatory strategy. This finding indicates that motivating an individual to change their negative emotions is a "critical (and in some cases, even sufficient) step in bringing about desired emotional change." (Tamir et al., 2019, p. 812). The researchers hypothesize that simply activating the goal may automatically activate the means the individual has available to pursue it. This automaticity of regulation, triggered by the mere activation of an emotion goal, could lead to difficulty for individuals who are strongly motivated to seek positive emotion or avoid negative emotion, potentially leading to the inflexible use of maladaptive regulation strategies and lower well-being (Ford & Mauss, 2014; Kashdan et al., 2006)

To my knowledge, no one has yet investigated the relationship between trait acceptance and emotion goals, or the link between emotion goals and emotion regulation flexibility. Mauss

and Tamir (2014) suggest that the most adaptive emotion goals may be those that are sensitive to *situational demands*, consistent with higher order goals, and consistent with basic needs (Mauss & Tamir, 2014). Setting an unrealistic emotion goal or failing to adjust an emotion goal in response to contextual feedback, is associated with poorer outcomes, such as less reported positive emotion in response to positive or neutral stimuli (Mauss & Tamir, 2014). Tamir et al. (2019) found that when individuals are instructed to use a particular emotion regulation strategy *without* a specified goal for regulation, individuals did not always choose to use the strategy to regulate their emotions pro-hedonically (i.e., to feel better). If emotion goals can trigger automatic efforts to regulate (Tamir et al., 2019) and hedonic goals are not universally adopted in the absence of instruction, it is possible that delaying the activation of hedonic emotion goals (i.e., to feel less negative emotion or more positive emotion) might facilitate a pause in automatic regulation efforts, creating the opportunity to flexibly match one's strategy to situational demands.

The preliminary evidence that acceptance has some regulatory effects that occur outside of conscious awareness (Ortner et al., 2007; Uusberg et al., 2016) may indicate that high acceptance individuals experience less need to set a hedonic emotion goals because regulation is happing in the background. By contrast, it may be that in the face of a salient aversive stimulus (i.e., a stressor), individuals who are not high in acceptance more quickly or more frequently activate hedonic emotion goals. And, if they have preferred regulatory strategies, they may automatically default to such strategies even if those strategies are not well-matched to context. Mauss and colleagues (2011) found that individuals who were experimentally induced to highly value happiness (i.e., an unrealistic emotion goal, were less happy in response to a happy film clip). It may be that automatic activation of hedonic emotion goals in response to stressors may

lead to a vicious cycle by triggering an unrealistic goal and *simultaneously* triggering an automatic/default regulatory strategy choice that is not well matched to context. Mauss and Tamir suggest that setting adaptive emotion goals may be a precursor to good outcomes from the flexible application of emotion regulation strategies (Mauss & Tamir, 2014). Perhaps habitual acceptance delays the activation of an emotion goals, giving individuals extra time and cognitive resources for better selection of a goal and better selection of the strategy they choose to facilitate it. This will be an interesting area for future research.

ii. Meta-emotions. As reviewed in a prior section, both theoretical work (Shallcross et al., 2015) and at least one empirical study (Mitmansgruber et al., 2009) point to reduced meta-emotion as a pathway through which acceptance may lead to better life outcomes. Models of emotion regulation, including Gross' Extended Process Model (Gross, 2015) and self-regulation (e.g., Carver & Scheier, 1999), contemplate that after the initiation of regulatory strategy, individuals engage in a certain level of ongoing monitoring of progress of that strategy. The output of this monitoring, which involves the comparison of an emotion goal to the current emotional state, is often itself emotional or at least positively or negatively valenced depending on the assessment of progress (i.e., disappointment or contentment; Mauss & Tamir, 2014). This emotional output can be characterized as meta-emotion, or emotions about emotions (Mauss & Tamir, 2014). If, as hypothesized above, individuals high in acceptance are less likely to automatically activate hedonic emotion goals, or they are setting more realistic emotion goals, it is reasonable to also suspect that meta-emotions as a result of ongoing monitoring may be reduced. Such individuals may be free to reallocate cognitive resources and behavior away from avoiding or controlling unpleasant emotion. In a review, Ford and Mauss (2014) suggest that this may be the case and that reductions in meta-emotions may be an important condition for

acceptance to enhance on well-being. However, as indicated in the prior section on mechanisms, research on the relationship between meta-emotions and acceptance is extremely limited, and it does not address how meta-emotions may be related to adaptive emotion regulation flexibility.

I suspect that acceptance reduces meta-emotions which frees up cognitive resources to facilitate subsequent adaptive emotion regulation in service of meaningful goals. Some studies provide preliminary support for the idea that meta-emotions influence the effectiveness of efforts to regulate emotion. In one study of suppression, the meta-emotion of inauthenticity appeared to account for the increases in daily negative emotion experienced by suppressors (John & Gross, 2004). And Mauss et al. (2011), found that the meta-emotion of disappointment accounted for the relationship between valuing happiness and feeling less happy in response to a happy film clip. If meta-emotions somehow confuse or interfere with emotion regulation efforts, lower levels of meta-emotions arising from acceptance may facilitate adaptive emotion regulation flexibility. More research is needed to clarify how acceptance, meta-emotions and emotion regulation flexibility interact.

iii. Emotional interference. My third proposed mediator is reduced emotional interference. As discussed in a prior section, there is preliminary evidence that acceptance, as an element of mindfulness, reduces emotional interference and improves task performance (Ortner et al., 2007). Reductions in interference may better enable individuals to refocus on meaningful goals in the face of emotional stimuli, facilitating adaptive emotion regulation flexibility. Emotional interference has been described as a measure of implicit or non-conscious emotion regulation (Gyurak & Etkin, 2014). And, in a review, Mauss and Tamir (2014) suggest that research indicates that non-conscious emotion regulation may be just as effective as conscious regulation, operating as a kind of psychological immune system, while using less cognitive

resources (Mauss & Tamir, 2014). It appears that certain emotion regulation strategies may be more cognitively costly than others. For example, research is showing that reappraisal is more cognitively costly in intensely negative situations and for individuals who do not frequently use reappraisal (Ortner, Ste Marie, & Corno, 2016). To my knowledge, no one has directly tested whether habitual acceptance leads to less emotional interference and more effective non-conscious regulation. It is also possible that more effective non-conscious emotion regulation makes available cognitive resources that can be used to address superordinate goals through subsequent regulation or behavior. Again, there also does not appear to be research demonstrating a connection between non-conscious regulation and adaptive emotion regulation flexibility.

B. Future Directions for Research on Acceptance

In the prior section, I outlined a conceptual framework based on theory and current research to explain how habitual acceptance might influence adaptive emotion regulation flexibility. The relationship between acceptance and emotion regulation flexibility has largely been unexplored. And, although there is preliminary research support that the three mediators I have proposed (i.e., emotion goals, meta-emotion, and emotional interference) may be related to acceptance and its impacts on psychological health, no research that I know of has explored how they might directly impact flexibility processes. In the section below, I will propose several additional avenues of further research on acceptance which might further illuminate how trait acceptance impacts psychological health. Specifically, I propose research to investigate the elements of trait acceptance (i.e., distinguishing beliefs from behavior or skill), research to investigate interventions designed to promote acceptance, and research on the neural-correlates

of acceptance, which ultimately may illuminate whether and how acceptance has implicit regulatory effects.

i. Distinguishing beliefs from cognitive processes. One fruitful avenue for future research would be to investigate the degree to which beliefs about emotion (e.g., emotions are neither good nor bad) and the cognitive process of acceptance in response to emotion contribute to the link between acceptance and well-being. Like many emotion regulation techniques, acceptance has been studied as a trait and as a stand-alone strategy for working with emotions—both of which can produce positive benefits (e.g., Aldao, Nolen-Hoeksema, & Schweizer, 2010; Ford et al., 2018; Singer & Dobson, 2007; Campbell-Sills, Barlow, Brown, & Hofmann, 2006). But, as discussed above, trait acceptance is typically measured with items that assess both a cognitive process as well as a mindset or belief about emotions. Ford and Gross (2018) suggest that emotion regulation behavior may be a key mechanism through which our beliefs about emotion exert influence over our lived experience. It will be helpful to illuminate which is the key driver of the positive outcomes associated with acceptance, particularly to inform interventions that might increase acceptance.

It may be that having certain beliefs about emotions - that emotions collectively and/or emotions individually are neither inherently good or nor inherently bad, beliefs that they are neither permanent nor necessarily true, and/or that emotions are not the self - is crucial to the helpful application of acceptance, though I am not aware of any research that has examined this question. After all, research on mindsets, which are beliefs that form mental frames or lenses that help us organize information and orient toward a situation, has demonstrated that such beliefs have significant downstream effects (e.g., Crum, Salovey, & Achor, 2013). Of particular relevance to acceptance is research on stress mindsets, which indicates that believing stress to be

debilitating or enhancing has an impact on physiological and behavioral responses to stress (Crum et al., 2013).

ii. Intervention studies. The ACT clinical model is designed to promote acceptance in service of psychological flexibility, with significant success (Hayes et al., 2012). And some emotion regulation interventions have also incorporated instruction in acceptance as a key element of improving overall emotion regulation skills (Berking & Schwartz, 2014). But more intervention research is needed to clarify how acceptance can be bolstered and what role mindful awareness skills play in this process.

In one recent series of studies, Lindsay et al. (2018) functionally dismantled mindfulness instruction into two elements: monitoring of present moment awareness and acceptance. They then offered two interventions, one based on group instruction and the other through a smartphone application, and in each case, they tested both monitor-only and monitor+acceptance versions of the intervention with a population of stressed adults. Participants receiving the monitor+acceptance conditions in both trials showed significant increases in daily levels of positive affect, over and above the monitor-only condition (which also improved over the control). Lindsay and colleges hypothesize that in addition to the carry-over of positive emotions from regular mindfulness practice, this type of training may increase positive emotions by "retrain[ing] habitual reactivity to affective stimuli in the environment" (Lindsay et al., 2018, p.966). However, and in contrast to studies of trait acceptance such as Ford et al. (2018), Lindsay et al. (2018) did not find evidence that monitor+acceptance training reduced daily negative affect. It would be an interesting avenue for future research to test whether this type of intervention actually changes levels of trait acceptance, as this study did not report on baseline or post-intervention levels of trait acceptance and/or mindfulness.

iii. Studies of neurocorrelates of acceptance process. Increasingly, neuroimaging studies of emotion are demonstrating that the brain represents valence (positivity and negativity) flexibly, with certain populations of neurons that respond to both positivity and negativity (Clark-Polner et al., 2016). And such research is also pointing to overlap between neural networks that respond to stress and those that respond to negative emotion, such as the salience network (Ganzel, Rarick, & Morris, 2016). The salience network has been posited to be the master conductor of the stress process, with "executive control" in allocating neural resources to "plan goal-directed action and modulate autonomic responses" (Ganzel et al., 2016, p. 712). It also appears that implicit and explicit processes of emotion regulation may activate different areas of the brain (Gyurak & Etkin, 2014). It would be an interesting avenue for research to explore how acceptance affects the stress response in the brain, and to what degree these processes activate implicit versus explicit emotion regulation regions. In particular, it would be helpful to map how acceptance modifies the activity of the salience network, which may help illuminate the mechanisms by which acceptance impacts the stress process and/or facilities adaptive emotion regulation flexibility.

C. Future Directions for Positive Psychology and Emotion Regulation

This paper has explored research on the emotion regulation strategy of acceptance, proposing that it may promote positive outcomes, including well-being, by enhancing adaptive emotion regulation flexibility. As reviewed in a prior section, positive psychology has lagged in its examination of how emotion regulation can improve human flourishing, choosing to primarily focus on strategies that emphasize cognitive change (Reivich et al., 2011) and the upregulation of positive emotions (Fredrickson et al., 2017). This has created a gap in positive psychology's treatment of adaptive strategies for working with negative emotion.

Positive psychology should consider adopting a broader functional approach to emotion regulation techniques – one that accommodates instrumental in addition to hedonic goals for regulation (Tamir, Mitchell, & Gross, 2008) – because encounters with negative emotion will necessarily arise during the quest for well-being and how we interact with them has consequences. New research on reappraisal may provide a model for these kinds of inquiries. Ford and Tamir (2019) take a functional approach to reappraisal and highlight factors that influence reappraisals effectiveness for a particular purpose, including individuals' abilities to use reappraisal and contextual factors that influence effectiveness. Research on acceptance and adaptive emotion regulation flexibility – the ability to effectively match regulatory choices to context in service of meaningful goals – will also address gaps in positive psychology's approach to negative emotion as both have shown to benefit well-being (Aldao et al., 2015; Ford et al., 2018).

VI. Conclusion

In this paper, I have highlighted a gap in positive psychology's examination of human well-being, namely that it has not fully examined the adaptive ways that people encounter and interact with negative emotions. I have explored research that shows that acceptance, a technique aimed at non-judgmentally and non-reactively encountering negative emotion, benefits well-being. Acceptance also provides a useful counterpoint to research showing that certain hedonic emotion regulation pursuits, including the tendency to pursue and highly value happiness and the tendency to avoid or suppress negative emotion, often backfire and harm well-being. Further, I have proposed that as the field of emotion regulation matures and begins to explore the complex and blended strategies that individuals take to toward regulating their emotions (Ford et al., 2019), it should focus on the role that acceptance may play as an adaptive initial response to

emotion that promotes adaptive emotion regulation flexibility. No research that I am aware of has addressed this question in this way, but research on the ACT clinical model which has informed this hypothesis indicates that it may be fruitful.

By proposing this line of inquiry, I seek to expand positive psychology's horizons toward a more complex and holistic view of human well-being. One that incorporates and even leverages the parts that are challenging and uncomfortable and offers a variety of tools for working with those experiences. Initially accepting emotions for what they area – complex, dynamic, and potentially useful sources of information about our perceptions of the world around us – might help us to learn from and respond to the world as it actually is.

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