CULTURE AND SAVORING OF POSITIVE EXPERIENCES

by

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Abstract

Savoring is the process by which people enhance, intensify, or prolong their affective reactions to positive events (Bryant, 1989). Drawing on recent research regarding cultural variation in affective norms and experience, I examined savoring and related constructs in Japanese, Asian North American and European North American respondents. As defined in previous research with American samples, the construct of savoring was found to generalize to East Asian samples, with equivalent factor structure and similar relations on measures of convergent and discriminant validity. As predicted, East Asian respondents endorsed lower capacity for anticipating, savoring in the moment and reminiscing. Mediation analyses suggested that attitudes regarding the importance of enhancing positive feelings and beliefs about change played a role in mediating the relation between culture and savoring, but self-construal did not. In self-nominated positive events, East Asian individuals included more interpersonal and achievement events and made reference to positive events from the distant past or anticipated future in addition to current events. In contrast, European North Americans nominated more leisure events, and were temporally oriented to the present and recent past. Predictions with respect to cultural differences in savoring strategies were generally supported, with European North Americans endorsing more Self-Congratulation, Behavioral Expression and Sensory Perceptual Sharpening both in self-nominations and ratings on the Ways of Savoring Checklist (WOSC). Although the majority of strategies nominated across cultures were captured by the WOSC strategies of Sharing and Memory Building, several novel savoring strategies were reported by East Asian respondents, including Making Greater Effort and Continuing Connection with Others Involved. These results are generally consistent with other research finding both elements of universality and cultural variation in the experience of positive feelings.

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Introduction

Much psychological research has investigated the coping responses that people employ to minimize the negative emotional effects associated with stressful life events. The parallel process, that is, the cognitive and behavioral strategies that people utilize to enhance, intensify, or prolong the positive emotional effects associated with positive life events, is a much more recent area of study. It has roots, however, in some of the earliest traditions of Western philosophical and psychological inquiry, a testament to the fundamental significance that positive affect assumes within the greater complement of human behavior and experience.

After briefly reviewing the history of Western attempts to understand the nature of positive emotion and the question of how to optimize its level, I consider the niche that positive processes have inhabited in modern psychological inquiry, as a backdrop for a closer examination of the significance of recent research investigating positive affect. Evidence is amassing with respect to the contributions that positive feelings make to both physical and mental health, and highlights the need to further develop our understanding of the processes by which positive feeling is enhanced. Towards this end, a conceptual model of positive affect mediation has been posited by Bryant (1989), who used the term *savoring* to refer to this process. The second section of the introduction presents Bryant's model and initial findings from the developing research on savoring. The case is then made for extending this research to examine the construct across cultures. In doing so, I review the cultural psychology literature with respect to anticipated differences in both the experience of and attitudes toward positive affect and discuss how these might be expected to manifest as variability in savoring attitudes and practice between people from Eastern and Western cultures.

Understanding Human Behavior Means Understanding Happiness

As far back as the humanistic orientation of the ancient Greeks, philosophers have sought to understand the nature of uniquely human capabilities. In the greater quest to explain humankind's intellect, creativity, and purpose, happiness emerged relatively quickly as the focus of philosophical investigation. Socrates oriented his systematic examination of human nature around the question "what is the good life?" after coming to the initial conclusion that a life that was good was necessarily rooted in self-analysis. As it came to be understood by early Greek philosophers, happiness went beyond the experience of simple pleasure or feelings of contentment, to a much richer conceptualization encompassing rational satisfaction (Miles, 1995). In this greater sense, the definition of happiness included the notion of having a virtuous character, enjoying strong associations, and pursuing a life of ethical action. For philosophers like Plato and Aristotle, feelings of contentment, well-being, and honor were the result of cultivating a virtuous character and engaging in virtuous actions, and it was through this path that one could experience pleasure, comfort, and abundance (Aristotle, translated 1998). Happiness was viewed not as a passive state, but as an active pursuit, and understanding happiness was a critical aspect for understanding human psychology, which itself was granted a central role in the larger pursuit of a comprehensive system of human knowledge (Brennan, 1986; Miles, 1995).

Later students of human nature went on to define happiness much less broadly, uncoupling the aspect of positive outcomes from greater ethical pursuits. Following Aristotle, the Greek philosopher Epicurus, whose teachings became the basis of the Roman Epicurean school, initiated a philosophical tradition that distilled the fundamental explanation of human activity down to two essential components: seeking pleasure and avoiding pain. Within such a framework, happiness was viewed as the ultimate goal of life, and human behavior was understood in terms of its service towards this end. It could be argued that a

variant of this particular conceptualization of *happiness* has held court among Western

schools of thought well into the modern era.

The Greatest Good for the Greatest Number

The word *happiness* is first noted to occur in English sometime around 1530, but did

not appear to find a place in routine usage until some time later (Kingwell, 1998). Of 14

English dictionaries published between 1679 and 1760, only 3 include definitions of

happiness. Notably, at this time happiness was construed in psychophysical terms, as the

experience of bodily pleasure and the absence of bodily pain. This reductive notion of

pleasure-defined happiness became the building block for the English Utilitarian

philosophers, who approached the questions of ethics, economics, and societal organization

from the principle of utility, wherein an action or rule is justified if it results in more human

happiness than the available alternatives. Under this reasoning, the production of pleasure

came to be viewed as both the motive for all actions and the standard by which they should

be judged. This point was succinctly expressed by John Stuart Mill, who wrote that because

human desires serve the ultimate end of happiness or pleasure, then "happiness is the sole end

of human action, and the promotion of it the test by which to judge all human conduct"

(1863/1959, p. 354).

Within a philosophical framework that identified happiness as the ultimate currency

of value, the question of what would result in the promotion or production of pleasurable

feeling in the greatest amounts assumed paramount significance. While attempting to define

the relation between positive affect and positive experience, theorists of the day gave

consideration to the qualitative and quantitative distinctions in positive affect associated with

various activities and experiences, and to such questions as whether or not happiness

accumulates in a linearly additive fashion with the concurrent occurrence of such

experiences. At the most basic level, within this philosophical tradition, actions were deemed

beneficial if they produced pleasure. Although initially no distinctions were made between various experiences if they shared the commonality of producing positive feeling, Utilitarian theorists ultimately came to the conclusion that not all pleasures are equal. Rather, there are qualitative differences in happiness beyond simple variations in intensity, such that some kinds of activities and pleasures are more deeply satisfying than others. For example, the happiness derived from eating a good meal is not necessarily comparable to that of bumping into an old friend, although both activities may confer pleasurable feelings. This marked an increase in the complexity of the conceptualization of happiness, and introduced the idea of both inter-stimulus and intra-individual distinctions in the pleasure response.

Viewed from one perspective, the Utilitarian movement appears to fall within the basic framework of a group selection argument or collectivist perspective. Working from the tenet that *"the best action is the one that results in the greatest good,"* Utilitarian philosophers concluded that, by extension, the best society was one that was organized to ensure the greatest happiness for the greatest number. Under the mandate of a socially engineered collective happiness, the sacrifice of the happiness of any one individual could be justified if it served the greater happiness of the group. But paradoxically coincident with this apparent collectivism was an underlying perception of individuals as selfish pleasure-seeking units. A critical aspect of the theorizing of British moralists such as William Paley, Adam Smith, and Jeremy Bentham, was the idea that pleasure for oneself formed the ultimate motive even in moral acts (Richards, 1987).

The primacy given to the needs or wants of the self has been recognized as part of a larger trend towards increasing individualism in Western culture over the past two centuries. Kingwell (1998) has suggested that this is a significant factor in understanding happiness vis-à-vis philosophical theorizing of the time. He noted that with the "conception of the authentic individual life comes a historically unique focus on the idea of happiness as the

point and privilege of every individual life" (p. 27). Although happiness may have been construed as a guiding motive for human behavior for centuries, it was not conceived as an explicit individual right until George Mason's Virginia Declaration of Rights, in May of 1776. Thomas Jefferson reiterated this claim later that year in the United States Declaration of Independence, when he listed "certain inalienable rights, that among these are Life, Liberty and the Pursuit of Happiness," as basic elements for a reasonable civilized existence. In addition to paying homage to the ancient Greeks by emphasizing the importance of understanding what is needed for *the good life*, this document launched a cultural ethos of personal fulfillment that dominates American, and arguably Canadian, ideology to this day.

Happiness and Positive Processes in the Discipline of Psychology

Not surprisingly given this longstanding interest, investigations of elements of *the good life*, including happiness, were pivotal in the beginnings of modern psychological theory. Seligman and Csikszentmihalyi (2000) characterized the discipline of psychology prior to World War II as having three distinct missions: curing mental illness, making the lives of all people more productive and fulfilling, and identifying and nurturing high talent. Indeed, shortly after psychology emerged as a recognized discipline of study in the late 19th century, questions regarding the nature of healthy functioning and the measurement of human abilities were as great a force driving psychological research and theory development as the quest to understand the nature of human dysfunction (Brennan, 1986). Psychological researchers in the early decades of the 20th century investigated positive traits (e.g., giftedness), adaptive behavioral functioning (e.g., marital happiness, effective parenting), and positive cognitive processes (e.g., finding meaning) (see Jones, 1953). Echoing the efforts of ancient philosophers, pioneer psychologists recognized the role that understanding positive functioning played in understanding human behavior.

Psychologists both in Europe and North America were intrigued by the role of happiness and positive feelings in human functioning, and this was reflected in both scientific and popular works of the day. Within the context of a larger examination of the history of humankind's pursuit of happiness, Kingwell (1998) reviewed several popular psychology publications from the early 20th century and found happiness to be presented as a basic element of human functioning and at the extreme, even "the normal condition of man in civilized life." Certainly, not everyone studying human behavior had reached the same optimistic conclusion, but psychologist Hanns Sachs (as cited in Kingwell, 1998) appears to have epitomized the Western ethos when he stated that "the normal function of the human mind is the pursuit of happiness...happiness is the ultimate, if not the exclusive purpose of the psyche."

With the occurrence of World War II, the discipline of psychology experienced a dramatic shift in its focus. Economic incentives for the study of pathology and the treatment of dysfunction prompted researchers to turn away from the study of adaptive mental functioning and the development of positive traits and abilities to the more timely tasks of assessing and addressing how individuals cope with negative conditions (Seligman, 2002b). In the United States, research that could be applied in the service of assessing and curing individual suffering met the funding objectives of the day of organizations such as the Veterans Administration and the National Institute of Mental Health. Information about dysfunction had practical application, and was seen to contribute more directly to the development of effective strategies for the treatment of mental illness. As a result, a *disease* model of psychology proliferated, which led to considerable advancements in our understanding of the negative impact of stressors on cognitive and emotional functioning, and the various strategies individuals utilize to cope with negative experiences and conditions of adversity. The downside of this focus on stress and coping, however, was that the other two

pillars of the discipline of psychology received scant attention. With researchers concentrating on categorizing and addressing dysfunction, inquiry into the nature of psychological experience beyond the level of normative functioning fell out of favor (Seligman, 2002b; Snyder & McCullough, 2000). The disease model of psychology erroneously "assumed that if mental illness were cured, happiness would naturally follow, as the normal human condition" (Baker & Stauth, 2003, p. 9).

Positive Psychology

Recently, there has been renewed interest in the topics of strengths, virtues, and adaptive functioning as part of a move to redress the discipline's imbalance and bring psychological research back to include the study of the positive complement of human behavior. This movement has been labeled *positive psychology*. Positive psychologists argue that the normal functioning of human beings cannot be accounted for within purely negative or problem-focused frames of reference. In addition to the study of pathology and weakness, a psychology of human behavior must also provide understanding of adaptive functioning and strengths, as earlier philosophers surmised. As described by Seligman and Csikszentmihalyi (2000) the "science of positive psychology aims to understand and build the factors that allow individuals, communities and societies to flourish." They argue that in the quest to understand how people survive under conditions of stress and adversity, over the past few decades researchers have largely ignored the question of how people achieve and express the positive features that make life worth living. Positive psychology attempts to address this imbalance by studying the subjective experiences, individual traits, and group institutions that both describe and explain how individuals optimize their functioning under benign conditions (Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001). Within this emerging orientation it is recognized that subjective adjustment is more than simply the absence of subjective distress, and involves more than just the ability to cope adaptively. It also

encompasses the development and expression of traits and cognitive schemas that allow one to interpret and respond to situations in ways that promote optimal levels of positive affect and life satisfaction.

Why is Positive Affect Important?

As evidence of the renewed interest in research relating to positive traits and experiences, recently two special issues of *American Psychologist* were devoted to positive psychology topics. Included were articles reviewing the current state of research on topics such as optimal experience, optimism, self-determinism, wisdom, creativity, happiness, and subjective well-being, as well as research examining the effects of those traits, functional states, and emotional experiences on variables such as mental and physical health. For example, Peterson (2000) reported that individuals high in optimism, which involves cognitive, emotional, and motivational components, tend to have better moods, have greater perseveration and success, and experience better physical health. Of 839 patients assessed at the Mayo Clinic, optimists lived 19% longer (Marita, Colligan, Malinchoc & Offord, 2000). In his studies of optimism and pessimism over the past 20 years, Seligman has found that pessimists are up to eight times more likely to become depressed when bad events happen, and do worse at school, sports, and most jobs than their objective skills would predict (Seligman, 2002a). In addition to beneficial effects on physical health, optimism is associated with better interpersonal relationships. Teaching optimistic thinking to children at age 10 can have preventative effects on mental health, leading to lower rates of depression during puberty (Seligman, 2002a).

Diener and his colleagues have amassed a comprehensive body of research regarding subjective well-being and its correlates at the national and individual level (for a review, see Diener, Suh, Lucas & Smith, 1999; Diener, Diener, & Diener, 1995). Subjective well-being is a multi-faceted construct, encompassing positive affect, lack of negative affect, and life

satisfaction judgments over both the short-term and longer periods (Diener, Oishi, & Lucas, 2003). It has been found to relate to personality variables (such as self-esteem, extraversion, neuroticism, and dispositional optimism), life circumstances (such as wealth or economic hardship), and cultural factors. Diener et al. (2003) point to the fundamental importance of subjective well-being as a necessary characteristic of a good society and "the good life".

Along the same lines, other researchers have begun to report findings that not only are positive processes, and in particular positive affect, experientially desirable, they play a significant role in both physical and mental health. Salovey, Rothman, Detweiler, and Steward (2000) reviewed the research addressing how emotion states impact physical health, and concluded that positive emotional states may promote healthy perceptions, beliefs, and physical well-being through multiple pathways. This impact is independent of the detrimental influence that negative affect can exert on health. Positive moods have been found to enhance immune system response through direct effects on immune physiology. Individuals who experienced desirable events more frequently were found to exhibit higher levels of immune system response on subsequent days (Stone, Neale, Cox, Napoli, Valdimarsdottir, & Kennedy-Moore, 1994). Similarly, research has shown that people who report that they are generally able to regain and maintain positive emotional states are less likely to get sick or utilize medical services when experiencing a stressful situation (Goldman, Kraemer, & Salovey, 1996). A study analyzing the autobiographical sketches written by 180 nuns as they prepared to take their final vows found that those whose sketches displayed more positive emotion were healthier and had greater longevity over the next 70 years, with 54% of the most cheerful quadrant still alive at age 94, compared to only 11% of the least cheerful quadrant (Danner, Snowdon, & Friesen, 2001).

Positive mood states have also been recognized to serve as a source of information, influencing people's assessment and interpretation of physical symptoms, as well as their

perceptions of risk or vulnerability (Salovey & Birnbaum, 1989). Through their association with optimism and resilience, positive moods may promote healthy behavioral practices by enabling individuals to confront the reality of negative situations, and move from avoidance or denial to adaptive coping. Reed and Aspinwall (1998) were able to experimentally facilitate the acceptance of health-risk information by having individuals recall their past acts of kindness and thereby experience a positive state. Another means by which positive affect can impact physical health is through the secondary effects of behavioral strategies whose primary objective is enhancing mood state. For example, exercising and drinking alcohol are salient examples of behaviors that can heighten or stimulate positive feelings, in addition to having direct implications, either positive or negative, for physical well-being.

In addition to influencing physical functioning, positive traits and feelings have been associated with enhanced mental and social functioning. Isen (2001) reviewed evidence that suggested that positive affect enhances problem-solving and decision-making. She noted that positive affect has been associated with greater flexibility and creativity in cognitive processes, as well as increased cognitive efficiency. Consistent with this, Bryan, Sullivan-Burstein, and Mather (1998) found that seventh grade students were able to generate more solutions to a social problem after a positive affect induction. Isen, Rosenzweig, and Young (1991) found that physicians who were given a positive mood-inducing event subsequently made more accurate and efficient diagnoses than a comparison group. Positive mood has also been found to facilitate self-regulation by enhancing careful processing of goal-relevant information (Reed & Aspinwall, 1998).

Aside from the fact that negative emotions have understandably attracted scientific interest because of the grave problems they can pose both for individuals and society, positive emotions have suffered neglect in part because they have lacked clear definition and differentiation. However, Fredrickson and Branigan (2001) have discussed Joy, Interest, and

Contentment as specific examples of positive emotions that can have a positive impact on health and well-being in many ways. First, with respect to physiological effects, studies have established that these emotions can serve to undo arousal associated with negative emotions. Second, in terms of cognitive effects, they have been correlationally linked to more constructive and flexible coping, and more abstract and long-term thinking. Positive emotions have also been associated with greater emotional distance after the occurrence of a negative event. Finally, Fredrickson and Branigan (2001) noted that these positive emotions appear to trigger an upward spiral into increased well-being, much the same way that negative emotions can perpetuate a downward spiral of mood. Consistent with these effects, Lyubomirsky (2001) found that compared with unhappy individuals, happy individuals experienced and reacted to events and circumstances in more positive and adaptive ways.

Fredrickson (2001) has theorized that positive emotional experiences may facilitate creativity and innovation through expansion of thought-action repertoires. In her *broaden-and-build* theory, she suggests that cultivating positive affect can be an adaptive coping strategy, not only serving to counteract negative affect, but also building personal resources for coping by broadening habitual modes of thinking (Fredrickson, 2001). Positive emotions such as joy facilitate play and exploration, bringing the individual into contact with novel information and experiences, which develops cognitive resources. Mood has been positively related to both perceived and actual social support, which themselves have been linked to well-being. Others rate people who are in a positive mood as more likeable (Frederickson, 2001). Positive affect has also been associated with prosocial behavior, such as helping, and prosocial cognitions such as interpersonal understanding and generosity (Isen, 2001). Reviewing the research findings concerning the beneficial effects of happiness, Lykken (1999) concluded that happy people get sick less often, recover faster, are usually more attractive to others, are more enjoyable to live with and work with, are more welcome mates

and better parents. Cultivating positive affect can serve to facilitate social bonds, cement friendships and coalitions, and build social resources, and thereby enhance health, resilience, and well-being.

How Do We Get to the Endstate?

As the above discussion illustrates, recent research has begun to inform our understanding of positive states and traits, and the many benefits they may confer across various areas of human functioning. After recognizing the wide breadth of impact and influence that positive states and traits have on variables ranging from physical health to problem-solving style, researchers have turned to the question of how this effect takes place. Here, it is helpful to draw a comparison with the development of research on stress and coping. Initially, researchers focused on understanding the physiological experience of stress, and the consequences it had for a variety of physical and psychological mechanisms within the organism. But they soon moved on to examining the factors that might mediate these consequences, and identifying the variables that allowed for differences in the stress response between individuals or within individuals across various contexts. It became clear that between the experience of a stressor and the outcome of distress individuals engaged in various thoughts or behaviors that influenced the relation between the triggering event and the endstate. Understanding the processes by which reactions to a stressor impact the resultant endstate has allowed for the opportunity to intervene and influence these endstates toward a more desirable end.

With the well-established stress and coping literature as a starting point, Folkman and Moskowitz (2000) examined how coping promotes psychological well-being vis-à-vis positive affect. Empirical evidence has demonstrated that individuals report experiencing not only negative affect but also positive affect in situations of chronic stress. In fact, in some cases, positive affect has been found to occur significantly more frequently than negative

affect. In a longitudinal study of AIDS caregivers, Folkman and Moskowitz sought to identify the psychological conditions necessary to generate and sustain positive affect in a situation of stress and the kinds of coping processes that might contribute to this end. They found that positive affect was associated with 3 types of responses. First, positive reappraisal, a cognitive strategy of reframing a situation to see it in a positive light, was associated with increases in positive affect, controlling for other coping strategies. Caregivers who reframed their experience from painful or exhausting to an opportunity to demonstrate their love or preserve their partner's dignity reported higher levels of positive affect. Similarly, increased positive affect was also associated with goal-directed problem-focused coping behavior. Individuals who pursued realistic goals through specific attainable tasks reported more positive affect than those who were more passive or who continued to focus on unattainable goals. Finally, Folkman and Moskowitz noted that individuals who reported more positive affect took advantage of ordinary events by infusing them with positive meaning. They observed that when asked to recall an action or experience that had resulted in positive feeling, the majority of the events nominated were ordinary events of daily life rather than special occurrences.

As Folkman and Moskowitz (2000) illustrated in a coping context, by examining the cognitive and behavioral strategies of individuals reporting more positive affect we can begin to understand how it is that some individuals come to possess the positive traits associated with greater well-being or experience desirable positive endstates whereas others do not, or if they do, experience them less frequently or with lesser intensity. Given the myriad benefits with which positive affect has been correlated, expanding our knowledge of the nature of the processes that make some people happy or optimistic or enthusiastic can complement the understanding we have developed with respect to adaptive functioning thus far.

Savoring: Mediating Positive Feelings

It is now generally understood that the process of *how* individuals cope with negative experiences is not the same as their level of distress. The *process* of coping is distinct from its *outcome*, to the extent that we can speak of adaptive and maladaptive coping attempts to differentiate cases in which the process results in either a positive or negative outcome, respectively. In the same manner, Bryant (2003) proposed that psychology needs a model of the *process* by which individuals respond to and influence the effect of positive experiences, distinct from the outcome, which is the endstate level of positive emotion. He suggested that research focused on positive experiences has frequently limited itself to examining the endstates, such as happiness, satisfaction, or subjective well-being.

Although empirical evidence regarding both the correlates and the effects of positive affect is amassing, the question of how these effects come to occur at the individual process level has only recently begun to receive attention, in studies such as that by Folkman and Moskowitz discussed above. Positive events and experiences occur in most people's lives, yet different individuals seem to derive more or less pleasure from them. Our understanding of the factors that influence individual emotional response is limited, although recent studies of cross-situational variation in positive feelings within individuals are an encouraging development (Oishi, Diener, Scollan, & Biswas-Diener, 2004). In recognizing the need for further research to increase our understanding of how people manage and influence these positive states, Bryant (2003) has designated the term *savoring* to refer to the process by which individuals mediate the experience of positive feelings.

Bryant (2001) defined savoring as "the capacity to attend to and enhance the positive experiences in one's life." Such enhancement may increase the intensity of the positive feelings, or prolong their duration. It is conceptually important to keep the process and the outcome distinct: savoring does not denote the actual enjoyment being felt, but rather the

cognitive and behavioral strategies through which people respond to positive experiences, which in turn mediate the enjoyment associated with them. In the simplest terms, savoring is the positive counterpart to coping. Just as coping responses can influence the experience of distress in the face of negative experiences, savoring responses can influence the experience of positive feelings associated with positive experiences. In the same vein, just as research into the process of stress management and coping strategies has provided valuable insights to our understanding of negative affective states such as anxiety and depression, so too is the study of savoring anticipated to further our understanding of positive affective states and the factors that influence them.

Initial Validation of the Construct

The basic theoretical assumption underlying the construct of savoring is that individuals have the capacity to attend to and enhance the experience of positive emotion. Bryant began by investigating whether the construct of savoring could be validated in people's subjective reports of the phenomenological experiences of the emotional aspects of their lives. He hypothesized that if people make self-evaluations about their capacity to handle the negative experiences in their lives they must also make self-evaluations about their capacity to enjoy positive experiences. In the initial stages of his research, Bryant found support for 4 distinct dimensions in people's ratings of the management of their lives, which reinforced his hypothesis. Specifically, individuals were able to distinguish and independently evaluate their ability to avoid bad things, to cope with bad things that happen, to obtain good things, and to savor good things that happen (Bryant, 1989). Most important for the initial validation of his developing theory, people's beliefs about the control of positive emotions emerged as distinct from those of control over negative emotions. Bryant found that people's judgments about their ability to savor good things were more strongly predictive of their levels of happiness, life satisfaction, and value fulfillment than were their

judgments about their ability to cope when bad things happen. In addition, gender

differences in the perception of these abilities were evident. Women perceived themselves to

be better at savoring than did men; men, in contrast, perceived themselves to be better at

coping than at savoring.

   With this initial validation for the construct of savoring, Bryant went on to explore in

greater detail people's beliefs about their capacity for different types of savoring. He

distinguished 3 main categories of savoring on the basis of temporal orientation: strategies

that enhance enjoyment of the present moment as it is unfolding; those that serve to mediate

the enjoyment to come from a future positive event or experience (anticipating); and thoughts

and behaviors directed at increasing the positive feelings associated with a positive

experience that has already happened (reminiscing). Bryant constructed the Savoring Beliefs

Inventory (SBI), a 24-item scale comprising 3 subscales that reflect beliefs about one's ability

to enjoy positive events through anticipating, savoring the moment, or reminiscing,

respectively (Bryant, 2003). In several studies establishing the validity and reliability of this

measure, he found that among samples of American undergraduate psychology students,

general self-evaluated capacity to savor was correlated positively with affect intensity,

extraversion, and optimism, and negatively with hopelessness, neuroticism, and physical and

social anhedonia. These correlations held within each of the separate types of savoring as

well. All subscales and the total scale score positively correlated with internal locus of

control, beliefs in self-control, gratification, self-esteem, and the reported intensity and

frequency of happiness. They were negatively correlated with strain, perceived vulnerability,

depression, and reported frequency of neutral and unhappy moods. In Bryant's samples,

individuals who rated themselves as most able to positively mediate their positive moods

tended to report having positive feelings more often and of greater intensity than those who

reported less savoring capacity. In addition, they endorsed stronger beliefs in their ability to

influence their experiences, more positive feelings about themselves and a generally more positive outlook. Bryant also noted some differences between the 3 categories of savoring in terms of their relations to other variables. For example, in his samples, guilt correlated negatively with savoring in the moment and anticipating, but not with reminiscing. Optimism and hopelessness were more strongly related to anticipating than to the other two types. Savoring the moment correlated with measures of subjective adjustment more strongly than did the other 2 subscales.

In addition, a preliminary study of the predictive validity of the SBI found that perceived capacity to savor within each of the temporal domains predicted the associated behavior reported by participants with respect to that type of savoring in a real-life situation (Bryant, 2003). Using the Anticipating subscale of the SBI as an example, Bryant found that scores on this subscale predicted participants' reports of how much they looked forward to their upcoming Christmas vacation, how long it had been since they last looked forward to it, and the extent to which they felt positive emotion after being directed to spend a minute engaged in anticipation. Thus, participants' judgments about their abilities to savor through anticipation appeared to accurately reflect both their self-directed behavior and their ability to derive a positive result when directed to engage in this type of savoring. Scores on the other subscales (Savoring the Moment and Reminiscing) did not predict anticipating, but were predictive of the behavior they were intended to capture.

In research utilizing the Savoring Belief Inventory, Bryant has found that people report the greatest capacity to savor by reminiscing, and rate themselves as least able to savor through anticipation. However, as noted above, perceived capacity to savor the moment has been the strongest predictor of overall happiness. People's beliefs about their capacity to savor the moment predicts levels of well-being and distress more strongly than do their

beliefs about their capacity to savor in the other two time frames. Happy people appear to be those that are able to enhance and prolong their enjoyment as it happens.

Bryant has also examined gender and age differences in savoring capacity. Consistent with his earlier research, he found that women tend to score higher than men on all 3 subscales of the SBI. With regard to the question of age differences, Bryant found that the pattern of results in a sample of older adults (ages 53 to 85), mirrored those established in his studies involving undergraduate students (Bryant, 2003). SBI Total score and scores on each of the 3 time orientation subscales were positively correlated with both frequency and intensity of happiness. They were negatively correlated with neutral and unhappy moods. Consistent with the findings for younger adults, capacity to savor the moment showed a stronger relation to current happiness than did either anticipation or reminiscing.

Bryant and Cafasso designed a children's version of the SBI to study savoring beliefs amongst children (Bryant & Veroff, 2003). They administered this instrument to several hundred children in grades 5 to 7, finding that children's beliefs about their capacity to savor showed less variability across the 3 time orientations than that reported by adults. Notably, children rated themselves as better at savoring by anticipation, or increasing the enjoyment by looking forward to an event that will happen, than adults did. What lies behind this difference remains to be investigated. As reflected in their heightened level of excitement for events that are upcoming, children's greater facility with anticipation may relate to still-developing cognitive capacities to abstract possible alternative outcomes that limit the awareness of possible disappointment. Another possible alternative may be that stronger belief in the likelihood of the anticipated outcome manifesting may make anticipation strategies more effective in terms of increasing positive feelings. Children may have experienced relatively fewer instances of anticipated outcomes not occurring, and so have a greater faith in the certainty of anticipated outcomes than do adults.

Savoring Strategies: How is Positive Affect Enhanced?

Coping research has informed us that individuals have at their disposal a wide array of strategies that can be applied when attempting to mediate the impact of negative experiences (for a discussion of various coping strategies see Folkman & Lazarus, 1980). The specific strategy utilized to respond to a negative situation depends on such factors as the type of stressor encountered, the situational context in which it occurs, and the individual characteristics of the person having the experience. For example, the same individual may respond quite differently when faced with the loss of a spouse compared to the loss of a job. Another individual may respond differently still to the same situation. And the different cognitive and behavioral responses of these individuals may lead to very different emotional consequences, either in kind (e.g., anger versus hopelessness) or degree (e.g., transient low mood versus chronic depression). Applying this same reasoning, we might expect that different kinds of savoring strategies may be elicited by different kinds of positive experiences, may be preferentially associated with specific individual characteristics, or may be deemed as more or less appropriate in certain situational contexts. Depending on the strategy used, the effect on positive feelings may take the form of increasing the intensity of feelings currently being experienced or lengthening the overall period of time for which those feelings are enjoyed.

To investigate these ideas, Bryant began by asking individuals to describe how they went about enhancing or prolonging their positive feelings after experiencing something good, to the extent that they were aware of doing this. He also probed for maladaptive savoring efforts; that is, thoughts or behaviors participants identified as possibly having interfered with their level of enjoyment. From these open-ended responses, Bryant identified a number of specific savoring strategies, describing what people do to enhance or recapture joy. He combined the most frequent responses with strategies culled from literature

discussing thoughts and behaviors that might amplify or dampen emotion and developed the

Ways of Savoring Checklist (WOSC; Bryant, personal communication). This checklist was

designed to parallel the Ways of Coping Checklist developed by Folkman and Lazurus

(1980), which has proven invaluable in increasing our understanding of the nature and

effectiveness of various coping strategies. The WOSC contains 60 ways of thinking or acting

that comprise a repertoire of responses available to individuals when they experience a

positive event. Some examples of items from the WOSC are: I reminded myself how long I

had waited for this to happen; I imagined a whole sequence of good events that could arise as

a consequence of this event; I took photographs with a camera to capture the experience.

Administration of the WOSC requires respondents to focus on a recent positive event,

describe it, and then rate the extent to which they engaged in each of the 60 listed thoughts or

behaviors in response to that event. In his studies, Bryant also asked individuals to evaluate

the positive event along several dimensions, including desirability, foreseeability, frequency,

and degree of personal responsibility for the event in the hopes of elucidating the specific

factors that lead people to adopt one savoring strategy over another. From this research he

has identified a reliable set of savoring approaches, varying in their cognitive or behavioral

focus (Bryant and Veroff, 2003). These approaches are listed in Table 1, which follows in

the *Methods* section.

The first savoring approach identified is *Sharing*. Strategies subsumed within this

approach include such acts as "I talked to another person about how good I felt" and "I

thought about sharing the memory of this later with other people." Bryant has suggested that

this dimension parallels the use of social support as a coping strategy. *Self-Congratulation*

encompasses strategies such as "I told myself why I deserved this good thing" and "I told

myself how proud I was." It describes strategies that incorporate taking pride in one's

situation in a sort of cognitive basking. *Memory Building* refers to strategies designed to

establish or elaborate a memory of the current event for later recall. Examples of acts that would be included in this approach are "I tried to memorize my surroundings" and "I took mental photographs." *Sensory-Perceptual Sharpening* involves selectively enhancing one's attention to certain stimuli or sensory processes in order to intensify pleasure. Examples of savoring strategies in this category include "I tried to take in every sensory property of the event" and "I concentrated and blocked out distractions." The approach of *Comparing* describes thoughts or behaviors that serve to contrast the current situation with another situation, or contrast one's feelings with those of others. Examples of such savoring strategies are "I reminded myself that others who were involved in the event were also thinking and feeling the same way" and "I thought about ways in which it could have been worse." *Absorption* refers to the approach of losing oneself in the moment, or optimizing one's ability to exist in the present situation. This is similar to Csikszentmihalyi's concept of flow and optimal experience, in which an individual experiences an intense cognitive immersion while engaged in an activity (Csikszentmihalyi, 1991). Absorption items from the WOSC include "I closed my eyes, relaxed, took in the moment" and "I just went through the experience one moment at a time and tried not to look too far ahead." In contrast to strategies that involve losing one's awareness of the sense of time passing, drawing attention explicitly to the transient nature of the experience can also serve to enhance one's ability to enjoy an experience. Several items on the WOSC reflect this approach of *Temporal Awareness*, for example "I reminded myself that nothing lasts forever so I must enjoy this now." *Behavioral Expression* describes a category of strategies that involve overt physical actions and expressions of positive feeling. Examples of these items are "I laughed or giggled" and "I tried to speed up and move more quickly." Finally, individuals also endorsed strategies that fall under the category of *Thanksgiving*, and include thoughts or actions relating to

appreciation of one's good fortune. Example items are "I reminded myself how lucky I was to have this good thing happen to me" and "I said a prayer of thanks for my good fortune."

Although most of the strategies discussed so far appear likely to have at least some effect on prolonging one's positive feelings, or causing those feelings to get more intense, other types of thoughts or behaviors may have the opposite effect, leading to lower levels of positive affect. Once again we can draw an analogy to the research on coping strategies. When faced with negative situations or experiences, individuals typically are motivated to minimize the negative feelings arising in relation to these experiences. They may have at their disposal a wide range of strategies to accomplish this end. However, some of the time, individuals may respond with thoughts or behaviors that are intended to reduce the negative emotion they are feeling, but which fail. For example, after being rejected by a romantic partner, an individual may try to assuage his or her loneliness by calling that person up, but this may result in further rejection and increased, rather than decreased, negative feeling. Or he or she may turn to substances such as alcohol or mood-altering drugs to provide a distraction from the suffering. Such strategies may be variably effective in the short-term, but fail to address the negative feelings in the long-term. Such approaches have been labeled *maladaptive* coping attempts because they do not achieve the desired effect, namely decreasing the negative emotions arising from the situation in a significant manner. Like coping mechanisms, savoring strategies also can be variably effective or maladaptive. Although intended to enhance or prolong positive feeling, they may either fail to heighten positive affect, or even have the effect of decreasing or shortening one's experience of pleasure. Bryant has subsumed several thoughts and behaviors that fall into this latter category of maladaptive strategies into the WOSC subscale of *Kill-joy Thinking*. Sample items include "I thought about things that made me feel guilty" and "I told myself how it wasn't as good as I'd hoped for."

The identification of maladaptive or kill-joy savoring strategies illustrates the fact that individuals may engage in behaviors with the goal of enhancing their positive mood, but may find that these actions actually have the opposite effect to what they intended. For example, the Comparing strategy of thinking how "things might never be this good again" may actually serve to dampen the enjoyment being currently experienced by calling to mind less enjoyable circumstances that are soon to come. Similarly, the Temporal Awareness strategy "I reminded myself it would be over before I knew it" may also serve to sensitize the individual to the limited nature of the positive experience, and contaminate the current experience of enjoyment with the concurrent experience of anticipatory regret. It remains to be explored what factors might influence whether an individual routinely utilizes strategies that are effective or maladaptive with respect to enhancing mood effects in the face of a positive experience or event, and how motivational variation may impact strategy use.

Variables Influencing the Use of Savoring Strategies

The WOSC has been administered to over 1,500 American undergraduates in several samples. Analyses indicate that savoring strategy use varies both by individual and situational variables. Thus, the specific strategies that individuals endorse show some predictable variations as a function of the type of positive event being savored, and the type of individual who is doing the savoring. Bryant found that both men and women more frequently endorse Self-Congratulation strategies when they are reporting on prolonging and enhancing the positive emotion associated with an achievement than for positive events involving interpersonal interactions or leisure activities. In addition, individuals endorse more Self-Congratulation strategies for events for which they rate themselves as having a greater degree of personal responsibility. Another situational factor that has been found to relate to differential strategy endorsement is the perceived rarity of the event in question. In Bryant's studies, both men and women endorsed a greater utilization of Memory Building

strategies for events that they perceived to be more rare. It may be that rare events require the use of particular strategies in the moment if other strategies are to remain available for use at a later time, or retain their efficacy. For example, reminiscing may be more effortful and less effective for rare events if some attention has not been directed towards preserving details of the event as it happens in memory for later recall. Without well-developed general templates for an event in memory, it may prove difficult to sufficiently recreate the experience to the degree necessary for effective activation of positive feelings unless a richly elaborated specific memory has been stored.

To examine the efficacy of savoring through reminiscence and explore its differentially reported utilization by men and women, Bryant, Morgan, and Perloff (1986) asked a sample of 200 university students and older alumni to elaborate on the specifics of their reminiscing behavior. Thirty-six percent of participants reported that they reminisce when they feel sad, whereas only 10% reported reminiscing when they feel good. Somewhat contradictorily, a positive correlation was found between amount of time spent reminiscing and self-reported happiness. Thus, although more individuals report reminiscing when they feel sad than when they feel good, the more time spent reminiscing, the happier participants rated themselves. Individuals in this study reported utilizing reminiscing to help them handle problems (29%), to feel good (19%), and to escape from the present (18%). The most common type of reminiscence concerned a recent personal relationship.

Most of the respondents in this sample (71%) reported utilizing specific strategies to facilitate their reminiscence. Use of specific strategies in general was associated with greater self-rated capacity to enjoy life. Among those who reported specific strategies, 61% identified that they relied on mostly behavioral strategies. These included looking at memorabilia (23%), sharing the memory with others (14%), playing music (13%), and trying to reenact events (13%). Only 39% reported that they mostly made use of cognitive imagery

to facilitate reminiscence, but these individuals reported greater happiness than did those using behavioral strategies.

In addition to situational factors, several individual variables were found to relate to variation in savoring strategies utilized. Bryant and Veroff (2003) reported that women endorse greater use of strategies pertaining to Sharing and Memory Building. In contrast, men reported more Kill-joy Thinking strategies, which maladaptively limit or reduce positive affect rather than enhance it. This variation in savoring strategy utilization is consistent with male reports of generally lower savoring ability. Not only have men rated themselves less successful at savoring, they have also endorsed greater use of strategies that are objectively less effective for enhancing positive affect.

A few studies have examined whether personality characteristics influence savoring behavior. In a study examining the effect of personality on the regulation of positive and negative affect, Billings (1998) hypothesized that individuals with higher levels of extraversion would utilize savoring strategies more frequently, and have better outcomes with these strategies, than individuals low on extraversion. However, no support was found for these hypotheses. Bryant, Yarnold, and Morgan (1991) examined reminiscing behavior in Type A and Type B individuals. They found that Type A's were less likely to report going over past events to store details for later recall, but more likely to focus their reminiscing on past achievements. There were no differences in frequency, style, or consequences of reminiscing between the two groups.

What Are the Effects of Various Savoring Strategies?

In addition to the correlational self-report studies reviewed above, a few studies have examined the impact of savoring strategies via experimental designs. Bryant tested the hypothesis that finding greater joy in the moment would boost mood and increase overall level of happiness by manipulating the focus of individuals instructed to take a 20-minute

walk once a day for 1 week (Bryant & Veroff, 2003). The savoring group was instructed to notice as many positive things as they could while on their walks, to acknowledge those positive things, and to think about what made each of them pleasurable. In this way, they were directed to focus their attention on those aspects that were positive during this event. A second group was instructed to notice as many negative things as they could, acknowledge them, and think about what made each aversive. Finally, the control group was not given any explicit instructions about what to do or think on their daily walk. At the end of one week, individuals in the savoring condition reported a greater increase in positive mood and overall level of happiness than those in the other two conditions. They also reported feeling a greater sense of appreciation for the world around them. From these results, Bryant concluded that, consistent with the suggestion from correlational studies, practicing savoring in the moment could lead to increased happiness. In addition, the study suggested that savoring ability could be facilitated by directed practice.

In a similar exercise, Seligman (2002a) found that engaging in helpful actions associated with positive feeling had a greater impact on subsequent positive feeling than engaging in a pleasurable activity that did not involve such prosocial elements. As part of a class exercise, one group of undergraduate students was directed to participate in a helpful activity, whereas another group were directed to partake in a pleasurable activity not directed towards assisting another. Seligman found that both groups reported positive feeling from their respective experiences, but those who helped another had more subsequent positive feeling throughout the day than those who simply indulged in a pleasure. Thus, in addition to focusing attention on positive elements of one's experience, increasing engagement in certain types of positive activities, for example those involving prosocial acts, may serve to increase positive feelings.

Bryant and Barnett investigated the effect of different reminiscence strategies on positive mood (Bryant & Veroff, 2003). They instructed 3 groups of individuals to reminisce for 20 minutes each day for one week. The first group was directed to use cognitive imagery while reminiscing, the second group was instructed to use memorabilia, and the third group was not given any explicit strategy. At the end of the week, individuals instructed to reminisce with cognitive imagery reported a stronger increase in positive mood and greater levels of happiness than individuals in the other 2 groups. In comparison to memorabilia, the use of cognitive imagery was also associated with more vivid recall. The researchers suggested that by making recall more vivid, cognitive imagery may have served to enhance individuals' attention to the reminiscing task, or provided a stronger link to the positive feelings initially experienced. The flexibility inherent in cognitive imagery may also allow the individual greater control over the aspects of the experience that are elaborated in recall, such that individuals are able to selectively focus their attention on aspects that are especially significant to their enjoyment.

Extending Our Understanding

Although in its infancy, research on savoring provides a promising platform for further investigations into positive affective processes. Researchers interested in mood have described an *affective explosion* within psychology over the course of the 1980s and 1990s, with the collection of an immense body of evidence regarding various aspects of short-term mood fluctuations and longer-term individual differences in temperament and emotionality (Watson, 2000). One of the most significant conclusions derived from this body of work has been the recognition that positive affect systems can be understood separately from negative affect systems (Watson, 2000; for a contradictory view, see Feldman Barrett & Russell, 1998), and that both make significant contributions to our understanding of mood fluctuations, individual differences in emotionality and temperament, and physical and

psychological health. As noted above, although investigations into the processes mediating negative affect have come a long way toward furthering our understanding of the ways that individuals cope with negative events and experiences, we are only just beginning to examine how individuals manage positive feelings. This despite the fact that the pursuit of positive feelings, or pleasure-seeking, has been recognized as a basic human motivation from well before the development of psychology as an independent science, tracing back to early Western philosophical traditions. Savoring theory thus appears to be a welcome development within the positive psychology movement, responding to the observed need to consider the positive as well as the negative side of psychological variables and processes.

Another movement in psychology, cultural psychology, has also recently highlighted some oversights of mainstream psychological theory and research. Specifically, cultural psychologists have noted that most psychological research has been embedded within the Western tradition of thought, resulting in an overgeneralization of concepts that have significance within Western culture. The (erroneous) assumption has been that these concepts occupy the same roles and carry similar importance within other cultures. Although researchers have responded by investigating whether conclusions established through studies in Western samples can be replicated in other populations (e.g., Heine, Lehman, Markus & Kitayama, 1999), cultural psychologists have recommended that considerations of cultural generalizability ideally inform psychological research at the *outset* of theory development. It is to this end that we turn to an examination of the influence of culture in affective process.

The Relevance of Culture to Positive Affect

There are many ways that culture can impact the experience and management of positive emotion. Because any comprehensive model of affective experience must acknowledge both trait / temperamental factors *and* situational / environmental factors, it is relevant to consider the mechanisms by which culture influences an individual's internal

context as well as the external situational context (Watson, 2000). For greater clarity, these can be organized within the framework of two general categories: the influence of variation associated with societal norms and values and the influence of culture on individual self-construal. Within each of these general categories, it is possible to identify several paths by which attitudes and behaviors concerning positive affect might be influenced. I turn first to the role that societal norms can play in shaping the attitudes about and experience of positive emotion, then discuss the impact of culture at the level of variation in individual processes.

Societal Influences on Affect

The culture within which an individual resides creates a societal context that defines specific designs for living, acceptable ways to deal with social situations, and values and beliefs commonly endorsed by its members (Triandis, 1989). One such value is the significance assigned to positive affect. Diener (2000) has found cultural variation in the value of happiness in studies of subjective well being across nations. Earlier I described the importance that ancient Greek philosophers and later Utilitarian theorists placed on happiness, as both a primary motivational goal and a standard by which to judge action. A similar emphasis continues in Western cultures to this day. In contemporary North American society, for example, the pursuit of happiness has moved beyond its status as a fundamental right (as per the United States Declaration of Independence) to emerge as the foundation of a multi-million dollar industry of books, workshops, pharmaceutical interventions, and leisure pursuits all addressing the objective of *being happy* or *being happier* (Kingwell, 1998). Heine et al. (1999) noted that "being happy is a basic value for most Americans" and, not surprisingly, "Americans think about happiness on a daily basis and rate personal happiness as especially important" (p. 774). However, in other cultures, happiness does not seem to occupy the same privileged position.

Thurman (1995) discussed the position of happiness in Buddhist tradition. From this perspective, enlightenment is happiness, and all individuals are equal in wanting happiness and not wanting suffering. However, joy is seen to come from desiring others to be happy, and suffering is seen to come from desiring the self to be happy. Compared to *true happiness*, which is the higher state of enlightenment, ordinary pleasures and positive affect are viewed as unstable, and characterized as the *suffering of change*. Another Eastern philosophical tradition, the Confucian perspective, stresses that self-cultivation undertaken as a means of achieving external rewards or goals shortchanges the greater benefits to be had by applying one's efforts to deepen self-knowledge and self-realization (Wei-Ming, 1995). The Confucian conceptualization sees the self as the centre of relationships, and embedded within the larger context of the world. As a result, self-cultivation with a broader focus impacts on the concentric circles of relationship moving out from the individual, and allows the aim and consequences of the individual's efforts to extend beyond the individual into the greater web of society. Bagozzi, Wong and Yi (1999) noted that in Confucian-based cultures, emotions tend to be more limited in their connection to events and in their personal influence.

Heine et al. (1999) cited Benedict as identifying a less favorable Japanese view of the pursuit of happiness, one that acknowledges the disruption it can create by interfering with tasks such as fulfilling obligations to others, which are rated as more important. In their research, Asian Canadians and European Canadians ranked happiness within the top 2 of a list of 20 traits in terms of desirability, whereas Japanese raters placed it at 18 (Heine et al., 1999). Other research comparing values between China and Australia similarly found that happiness was rated less important in the Chinese sample (Feather, 1986). Markus and Kitayama (1994) noted that in Japan emotional states that accompany interdependence, including feelings of affiliation, friendship, and calm, are regarded as more positive.

Consequently, social emotions such as sympathy, modesty, and agreeableness are seen as pleasant and desirable.

Cultural differences regarding the value placed on happiness reflect, in part, differences in the perceived relations between events over time, which can influence the significance assigned to positive events and experiences and the reactions such experiences warrant. Ji, Nisbett and Su (2001) found that European North Americans prescribed to a linear model of prediction and emphasized continuity in the analysis of trends, whereas Chinese were more focused on the inevitability of change, giving responses that were consistent with a u-shaped model of prediction, in which situations go from one extreme to the other. In their studies, Chinese participants endorsed a greater probability of change than European-North Americans, and also predicted more change in the direction and rate of trends over time. These beliefs were applied to predictions about their own levels of life happiness, and to the occurrence of positive events. Within the context of their linear belief system, for European North Americans the appearance of positive events is a signal of more positive things to come, and might thus be seen as a welcome occurrence and something to enjoy. However, within the context of a u-shaped model, a belief in constant and oppositional change may lead Chinese to view current positive events as a sign of future hardship, whereas negative events might be seen as a sign that good fortune is on the way. Thus, Chinese may be less likely to view positive experiences as something deserving of extra attention, both because they are seen as transient and because such a focus on what is currently occurring may leave one less prepared for what is coming, which is assumed to be more troublesome. Ji et al. (2001) presented several Chinese proverbs that reflect this attitude toward positive experiences, including "Be prepared for danger while staying in peace" and "When you succeed don't be conceited; when you fail don't be dejected." Bagozzi et al. (1999) described a dialectic view of emotional experience in Chinese culture,

with a tendency to compensate for emotional experience felt at one moment with the anticipation of its opposite. They suggested that the occurrence of strongly pleasing events provokes an acknowledgment that things can turn bad the next time, rather than a focus on the current good fortune. Whereas from a western perspective such a mindset may appear to detract from the amount of enjoyment drawn from positive experiences, such a view may have the benefit of moderating the level of distress associated with negative experiences. Ji et al. (2001) reported that Chinese endorsed the belief that a negative occurrence can provide an opportunity to become more mature, as maturity is seen to develop in part through the experience of pain and loss. In a similar vein, Heine et al. (1999) described a sense of balance that characterizes Japanese culture, rooted in the Buddhist emphasis on the transience of all things. Happy experiences are expected to come to an end, and even possibly precipitate negative situations, to restore the sense of balance. When negative experiences are encountered, they can be embraced as opportunities for growth and improvement.

"Cultures develop conventions about what to pay attention to and how much to weigh the elements that are sampled" (Triandis, 2001, p. 908). Markus and Kitayama (1991) suggested that the differing conceptualizations of positive experiences within Eastern and Western cultures influence motivation to attend to and enhance positive feelings. Kitayama, Markus, and Kurosawa (2000) found that European-American students reported experiencing many more positive emotions than negative ones, whereas Japanese students reported equal levels of positive and negative emotions. In several studies, Japanese individuals reported feeling emotions less intensely and more briefly than European-Americans, and were more likely to endorse a lack of any emotion when time-sampled for their current state (Matsumoto, Kudoh, Scherer & Wallbott, 1988; Mesquita & Karasawa, 2002). Heine et al. (1999) noted that Japanese individuals have relatively less motivation to enhance positive feelings, both because of the meaning ascribed to them and the potentially disruptive force

that emotions can exert on relations with others. Lyubomirsky (2001) suggested that along with reinforcing or restraining motives to pursue happiness or enhance positive feelings, cultural norms may influence the experience of positive feelings by encouraging or discouraging practices known to have moderating effects, such as social comparison or self-reflection. Contrary to the Western focus on intensifying positive affect, research has suggested that in Eastern cultures efforts are made to control and moderate feelings to reduce their influence (Russell & Yik, 1996; Tsai & Levenson, 1997).

Finally, there are likely differences between cultures in societal norms regarding the types of experiences that result in positive emotion. Emotions are a fundamental element in the social regulation of behavior, such that normative behavior is typically associated with positive feeling, which functions to reinforce and regulate action (Markus & Kitayama, 1994). Within Western cultures, social norms emphasize both the individual as the determinant of goal-directed action, and enjoyment as a basic motivator. In contrast, as noted above, norms in Eastern cultures may emphasize the role of important others in determining objectives and the subjugation of one's personal feelings in service to other aims. Bontempo, Lobel, and Triandis (1990) found that individuals in collectivist societies reported feeling enjoyment from doing what their in-group members expected them to do, and acting in ways that corresponded to in-group norms. Oishi and Diener (2001) found that increases in subjective well-being were associated with the achievement of goals that would make others happy in Asian American and Japanese respondents, in contrast to European Americans, who showed increases in subjective well-being with the achievement of goals for fun or enjoyment.

Cultural Variation in Self-Construal

One of the most influential variations noted between cultures lies in the nature of self. Cultural psychology maintains that culture and the self are inextricably intertwined and

mutually constitute each other. Construals of self are shaped through engagement in the understandings and practices of particular worlds and contexts. Cultural contexts are associated with a set of beliefs and practices about how to be a *good* person, which is an integral part of one's sense of self (Markus & Kitayama, 1994). Triandis (1989) has investigated how differing cultural contexts may be associated with variation in aspects of the self. He suggested that the degree to which a culture can be characterized as individualist or collectivist has implications for the general nature of self-structure within its individual members, while at the same time influencing the environmental context from which information is gleaned with respect to attitudes, beliefs, intentions, norms, roles, and values. Triandis noted that individualistic cultures tend to emphasize elements of identity that reflect possessions, both tangible and intangible. Examples include what one owns, what experiences one has had, and what one has accomplished. Accordingly, personal goals have high priority, in contrast to collectivist cultures, where collective goals frequently assume equal or greater importance than personal ones. Triandis (1989) found identity to be defined more in terms of relationships in collectivistic cultures. Collectivists are described as feeling interdependent with members of the collective, tending to share resources with them, being concerned about the results of their actions on others in the group, and feeling involved in others' lives. Collectivists perceive in-group norms as universally valid, and are more likely to express social behavior accordingly. However, it should be noted that although collectivist individuals behave in harmony with in-group members, they are less concerned with prosocial behavior toward out-group members and indeed studies have demonstrated a greater difference between in-group and out-group interactions for collectivist cultures than for individualist cultures. In individualist cultures the largest distinction is between self and others, whereas for collectivist cultures it is between in-group and out-group (Triandis, 2001).

Triandis noted that communal social relationships are more common in collectivist cultures and, of particular interest to the current investigation, that these emphasize the importance of maintaining equality of affect (such that if one is sad, the other is sad too) and concern for the other person's needs. For example, Masuda (personal communication, 2004) reported that for Japanese, the experience of happiness associated with a positive experience is often limited by concurrent feelings of guilt that one is experiencing a benefit that others do not have. Similarly, Kitayama (personal communication, 2004) reported that for Japanese individuals the negative feelings precipitated by a negative experience are mitigated somewhat by positive feelings of comfort associated with eliciting sympathy from others. In both cases, the result is to temper the intensity of the feeling state, reducing the disparity between one's own feelings and those of relevant others.

In addition to greater differences in interpersonal behaviors, Triandis has noted that some cultures (e.g., Indian) appear more tolerant of contradictions between elements of the self, and exhibit greater differences between the private, public, and collective selves. The private self describes the assessment of one's self by oneself, comprising cognitions involving traits, states, or behavior of the person. The public self describes the assessment of one's self by the generalized *other*, and comprises cognitions about how others view one's traits or behavior. Finally, the collective self describes the assessment of one's self by a specific reference group, such as family or coworkers. Within individualist cultures there is a tendency to strive for consistency between both private and public representations, to the point that a consistent and integrated knowledge of oneself is an integral aspect of many Western theories of psychological health (Heine, 2001). In contrast, collectivist cultures allow for, and even expect, deviation in self-presentation depending on the situational and relational context. Evidence suggests that individualists see the self as stable and the

environment as changeable, whereas collectivists see the self as changeable with stability to be found in the social environment (Triandis, 2001). As summarized by Triandis:

> Traits exist in all cultures but account for behavior less in collectivist than in individualist cultures. Situational determinants of behavior are important universally but are more so in collectivist than in individualist cultures. Cognitive consistency among psychological processes and between psychological processes and behavior occurs universally, but it is less important in collectivist than in individualist cultures (p. 912).

Consistent with this, Campbell, Trapnell, Heine, Katz, Lavellee, and Lehman (1996) reported a stronger correlation between self-esteem and self-concept clarity, a measure of consistency of the self, for European-Canadian students than for Japanese. Kashima, Siegal and Tanaka (1992) found that Japanese undergraduates endorsed weaker beliefs in attitude-behavior consistency than Australians.

Further developing the distinctions noted by Triandis (1989), Markus and Kitayama (1991) described how the construal of the self, others, and the nature of the relationship between the two can vary between cultures. They noted that self-construal impacts on aspects of perception, cognition, emotion, and motivation in ways that can give rise to cross-cultural variation in both internal experience and external behavior. According to Markus and Kitayama, "these conceptions of the self can influence the nature of interpersonal phenomena such as conformity, obedience, and social comparison, and intrapersonal phenomena such as self-affirmation, self-verification, self-monitoring and self-esteem" (1991b, p.19).

Markus and Kitayama labeled the Western view of self *independent* and the Eastern view *interdependent*. The independent construal of self conceptualizes the self as a separate,

autonomous entity, with distinct attributes that are causally responsible for how an individual behaves. The crucial self-representations in an independent self are localized within the individual. The primary objective of the independent self is to maintain independence, and to discover and express its own uniqueness. Vis-à-vis behavior, assertion of the self is highly valued, and actions are seen primarily as the consequence of specific internal attributes, which include traits, motives, abilities, and values. By contrast, the interdependent construal of self more common in Eastern and collectivist cultures, as can be found in Asia, Africa, Latin and South America, places the emphasis on the fundamental relatedness and connectedness of individuals. The interdependent conceptualization localizes crucial self-representations in the context of the self in relation to specific others. The nature of the self is defined according to the specific context in which one is operating, for example as a mother, daughter, coworker, or friend. The primary objective of the interdependent self is to maintain interdependence, which involves attending to others, fitting in to the social context, fulfilling and creating obligation, and supporting harmonious interactions (Markus & Kitayama, 1994). Behavior is viewed as a consequence not only of one's own attributes, but also of the demands of the situation and the attributes of others.

Although Markus and Kitayama described two types of self-construal, they noted that these are better viewed as a continuum than as distinct categories, and stressed that within each culture there is likely to be a distribution of individuals whose self-construal falls at various points along the range from independent to interdependent. However, between cultures, one can describe general tendencies in terms of where the majority of individuals cluster along this continuum. Similarly, Triandis (2001) suggested that individuals sample from both individualist and collectivist cognitive structures, and introduced the terms idiocentrism and allocentrism to refer to individualism and collectivism, respectively, at the individual rather than cultural level. In addition to culture, variables such as gender,

ethnicity, religion, region, SES, education, and historical and generational cohort may also predict specific patterns of distribution with respect to self-construal.

The Influence of Self-Construal on Affect

Markus and Kitayama (1991a) discussed how the nature of self-construal can impact cognition, emotional experience, and motivation, and it is through these various pathways that we can identify implications for attitudes and behaviors concerning the experience and management of positive affect. First, inasmuch as positive affect often results from the realization of one's objectives, differences in motivation can result in different affective payoffs for actions. In an independent or individualist cultural context, actions that contribute to the achievement of the goals of expressing one's uniqueness and developing one's potential are likely to produce positive feelings. In a study by Kitayama and colleagues, college students in Japan and the United States were asked about the frequency of various feeling states, and relations between these were examined. For the Japanese respondents, there was a strong correlation between generic positive feelings and interpersonally engaged emotional experiences, such as friendship (Markus & Kitayama, 1994). The frequency of general positive feelings was more weakly correlated with positive feelings deriving from personal achievement, and in fact feeling good about personal achievements was correlated with general negative feelings. In contrast, for European-Americans, general positive feelings were highly correlated with positive feelings from personal achievement and only moderately correlated with interpersonally engaged positive emotion. Thus, although activities that enhance self-esteem are likely to lead to positive affect for European-North Americans, they may be less likely to do so in Japanese samples (Heine et al, 1999). Such behaviors and situations are therefore unlikely to become the objects upon which savoring strategies are directed. However actions that serve to reinforce the harmony of one's relationships and one's connectedness with others are more likely to

produce positive affect, and it is these latter experiences that would serve as the stimuli upon which savoring strategies might be applied. Kitayama (2001) reported that amongst Japanese, feelings of happiness correlated strongly with feeling connected (r=.8) but much less so with self-esteem (r=.2). The opposite held true for European-Americans (r=.3 for connectedness, r=.9 for self-esteem). To illustrate with an example, individualists may feel a sense of happiness related to increased self-esteem when they "stand up for themselves" in a difficult situation, and later recall of this event may enhance their positive feelings. In an interdependent or collectivist cultural context, such actions may be seen as too self-focused, and self-assertion viewed as immature (Cross & Markus, 1999). Given these negative implications, such actions likely would not be associated with increased positive feeling. In contrast, those from interdependent cultures may understand the desirability of humility, and the offensiveness of gloating over one's success or demonstrating excessive confidence in one's abilities. What might be negatively framed as *acquiescence* or conformity for someone in an individualist culture may be positively experienced in a collectivist culture as an instance of adjustment and restraint of one's own needs to serve the needs of the group, and be associated with positive feelings if later recalled. Whereas activities that defer one's own desires in the service of maintaining harmony in the group are likely to have a more positive connotation and produce more positive affect in East Asian individuals, European-North Americans may feel more dissatisfied when their own needs have not been met, or when their expression has been limited. Similarly, actions that serve socially-oriented achievement motives and meet the expectations of significant others may produce greater positive feeling for those with interdependent selves than for those with independent selves, and be more frequent stimuli for savoring than those that serve one's own wants.

Triandis (2001) noted that information that supports the current self-structure tends to be viewed more positively than information that challenges it, and in this way different types

of cognitions may be associated with positive feelings across different cultures. Positive feelings about the self may arise from suggestions of uniqueness for Westerners, but for Easterners enhancement of similarity with others or commonality may be more desirable (i.e., avoiding being "the nail that sticks out"). There is extensive evidence suggesting that individuals in Western cultures are motivated to view themselves positively, whereas those in collectivist cultures have a stronger motivation to be viewed positively by others, which has been referred to as *face* (Heine, 2001). Moreover, for Easterners, events that serve to enhance the appearance of others may indirectly, and more comfortably, enhance the self by association. Evidence suggests that individuals in collectivist cultures view in-group members as extensions of their selves, whereas in individualist cultures the self is seen as distinct from all others, regardless of relationship (Heine, 2001). Interdependent individuals may therefore treat positive experiences occurring for in-group members the same as those that are personally experienced.

Thirdly, findings suggesting that those with interdependent selves are more reluctant to abstract general personality traits from concrete behaviors may be extrapolated to the matter of savoring, and lead to the hypothesis that those with interdependent selves are likely to find less value in dwelling on any particular positive event or experience, as it is limited in informational value in a general sense. One may think, for example, although this particular project may have gone well, it is not likely to be seen as evidence of generally high abilities, and therefore, paying it too much attention may seem inappropriate. Suh, Diener, Oishi, and Triandis (1998) found differences between individualist and collectivist cultures in terms of the influence of positive feelings on life satisfaction judgments. They suggested that collectivists may be more likely to pay attention to information from social appraisals and social norms rather than personal emotion states to inform such judgments. From this, one would predict that individuals with interdependent construals of self would rate savoring

strategies as less important and less useful in general than those with independent self-construals.

Markus and Kitayama (1991b) suggested that salient aspects of emotional experience are likely to vary cross-culturally with construal of the self. They suggested that the internal core of emotional experience, such as physiological responses and hedonic tone are likely to be more salient for individuals with independent selves, whereas external, relational, and socially embedded aspects of emotional experience are likely to be more salient for those with interdependent selves. Consistent with this hypothesis, empirical results have shown that independent selves report the experience of emotion as stronger and more intense, endorse more bodily symptoms associated with emotional experience, and are more likely to respond behaviorally when emotionally activated (Markus & Kitayama, 1991b, Matsumoto et al., 1988). Research has also shown that emotional experience is more likely to be localized within the individual for European-North Americans, whereas it is more frequently located outside the individual by Japanese. Japanese individuals have been found to endorse greater experience of interpersonally engaged emotions, which emphasize one's connection with others and to view feelings of affiliation, friendship, and calm as positive (Kitayama et al., 2000).

Behavior itself may take on a different flavor between independent and interdependent individuals, as a consequence of different attitudes about how individuals should negotiate their place in the world. Independent selves place greater emphasis on primary control and favor directly acting on the world to produce changes that fit their desires and lead to greater positive feeling. Interdependent selves make greater use of secondary control, and utilize accommodation to the existing reality to achieve a desirable feeling state (Morling, Kitayama, & Miyamoto, 2002). Because independent self-construals emphasize agency and encourage dominance of one's own traits and motives, Westerners may feel more

positive in situations in which they have greater control, and can shape the environment to accommodate their needs. In contrast, East Asians weigh effort over innate abilities in terms of achievement, endorsing an incremental as opposed to entity theory of self (Dweck, 1999). Not only does this impact on achievement-oriented behavior and attributions for success, it also creates greater positive connotations to situations involving effort and perseverance. For East Asians, a positive experience arising from intense or persistent effort may be more self-rewarding than one that occurs relatively effortlessly. For Westerners, although effort is viewed positively, achievement that is less effortful may imply greater innate abilities and therefore positively reinforce self-views.

Cultural Variation in Savoring

Research findings from cultural psychology suggest the possibility, even likelihood, of East-West differences in the experience and expression of positive affect, as well as how positive affect is managed. Moreover, there is support for the idea that the pursuit of happiness may not be as strong in Eastern cultures as it is in North America. I have reviewed evidence suggesting that various factors might lead to differences in this pursuit. Societal values in Eastern cultures recognize the potentially disruptive nature of personal happiness and emphasize feelings related to social connection and harmonious social interaction. Beliefs about change have been found to differ between Eastern and Western cultures (Ji et al., 2001), and offer one explanation for why the enhancement of present or past happiness might not always be construed as a good thing. Processes operating at the level of the individual – namely, independent and interdependent self-construals – also may act to produce differences in the motivation to enhance positive feelings, as well as the strategies used to enhance them.

Developments in cultural psychology over the past decade not only have drawn attention to the influence of culture on emotional systems, but also have underscored the

tendency for social psychological researchers to neglect questions of cultural variation when framing their theories (Markus & Kitayama, 1994). As an area of research still in its infancy, savoring offers a rare opportunity to incorporate theory-driven cultural considerations into the basic conceptual framework of this construct as it is being established. Surveys of savoring behavior to date have been primarily restricted to European American samples of undergraduate students, and it has been with such samples that the Ways of Savoring Checklist was initially developed and tested. The current research examined perceived capacity to savor and specific savoring strategies in undergraduates from Japanese, Asian North American and European North American backgrounds, and investigated the relations between savoring behavior and self-construal, beliefs about change, and attitudes pertaining to the importance of enhancing positive feelings.

Although positive psychology and cultural psychology are relatively new areas of study, both literatures are sufficiently advanced to offer several specific and testable hypotheses. At the most general level, I anticipated that the construct of savoring as defined and operationalized in Western-based studies would show the same general meaning and structure for those from East Asian cultures. However, I predicted that East Asians would have a lower overall endorsement of savoring capacity than would European North Americans. This difference was hypothesized to relate to differences in beliefs about change and also to the ways in which self-construal affects the experience and management of positive affect. In addition to endorsing lower savoring capacity, I expected that East Asian respondents would ascribe less value and importance to the enhancement of positive feelings than would European North Americans, reflecting differences in the prescribed view of positive feelings and norms regarding emotion behavior between those cultures, and further that attitudes about importance would relate to reported savoring capacity. Moreover, given cultural variation in the payoffs of positive feelings associated with different events in terms

of their impact on self-enhancement and social connection, I expected to find differences in the types of events associated with positive feelings nominated by European North American and East Asian respondents. Specifically, I anticipated that East Asian respondents would show greater focus on others and nominate more interpersonal events. European North Americans were expected to show greater focus on the self, and nominate more achievement events.

Differences were also expected at the level of endorsement of specific savoring strategies, both in terms of their focus and content. In previous research, Westerners have been found to focus more on the internal aspects of the experience of emotion, in contrast to Easterners' greater awareness of external aspects such as social elements. As such, I anticipated that European North Americans would exhibit greater endorsement of strategies that emphasize the sensory aspects of positive feelings, as well as a greater focus on the self. Given the relations of independent self-construal to motivation to reinforce uniqueness and primary control, European North Americans were predicted to show greater endorsement of strategies that emphasized causal links between their own abilities and actions and the experience. Less endorsement of self-congratulatory strategies was expected by East Asian respondents, drawing on the relations of interdependent self-construal (or less independent self-construal) with motivation to maintain harmony and secondary control. Differences in endorsement of behavioral expression strategies were predicted given findings that individuals with independent self-construals are more likely to respond behaviorally when emotionally activated. Prediction of greater endorsement of killjoy strategies by East Asian respondents followed from findings regarding motivation to subdue positive affect and greater belief in nonlinear change. Finally, in addition to examining differences in endorsement rates of Western-identified savoring strategies, this research presented an

opportunity to identify novel East Asian-nominated strategies not covered by the WOSC

categories generated with American data.

Method

The empirical study described below was designed to address the following research questions, based on the framework outlined in the previous section:

1. **Is the construct of savoring conceptually similar across cultures? That is, is there justification for investigating savoring cross-culturally?**

2. **Are there cross-cultural differences in the efforts people make to prolong and enhance positive feelings? To what extent do cultural differences in self-reports of capacity to savor relate to underlying differences in self-construal, beliefs about change, and attitudes regarding the value of savoring?**

3. **Are there differences between Easterners and Westerners in terms of *how* they savor? Do these differences relate to cultural variation in the significance assigned to different types of positive events and experiences or to cultural differences in self-construal?**

To examine these issues, I utilized a correlational design and surveyed the attitudes and behavior of East Asian and North American individuals in several data collections. The participants within these samples and the measures used in these data collections are described below.

The current research is a starting point for the development of our understanding of the savoring construct outside of the Western cultural context. Where possible, specific hypotheses were drawn from the literature and findings reviewed with respect to both culture and affective functioning. However, given the early stage at which our understanding of savoring currently lies, some of this work was necessarily exploratory and descriptive.

Participants

Participants were undergraduate students attending classes at the University of British Columbia and Loyola University Chicago (total $N = 1,361$). The former included Japanese undergraduate students from Ritsumeikan University in Kyoto who were taking classes at the University of British Columbia as part of an 8-month academic exchange program, as well as UBC students enrolled in Arts Studies or Psychology courses. The Loyola samples consisted of individuals enrolled in undergraduate Psychology courses. For all samples, participation in the research was an optional way to fulfill part of their course requirements. The overall sample comprised three main cultural groups: native Japanese (total $N = 252$), Asian North Americans (total $N = 324$), and European North Americans (total $N = 191$). Cultural group membership was determined by participants' reported ethnicity and country of birth. In cases in which these variables were not in agreement, membership was decided by the reported culture of most influence. The Japanese group consisted of 182 women and 70 men, with an average age of 20.5 years. The Asian North American group included 200 individuals of Asian ethnicity who immigrated to Canada or the United States from an Asian country within the last 10 years (126 women, 74 men), as well as 124 individuals of Asian ethnicity who were born in North America (73 women, 50 men, 1 gender unreported). The average age of respondents in these two groups was 20.1 and 19.3 years, respectively. Although the Asian individuals born in North America were younger (t (303) = 4.83, $p < .01$), comparison of the mean self-construal scores revealed no significant differences in independence or interdependence levels (Independence 3.41 vs. 3.37, t (260) = .69, $p = .50$; Interdependence 3.61 vs. 3.57, t (260) = .67, $p = .50$). As well, there was no significant difference in level of identification with Asian culture (8.08 vs. 7.77, t (260) = -1.45, $p = .15$). Individuals born in North America did report higher levels of identification with European North American culture (8.04 vs. 7.16, t (260) = -4.84, $p < .01$), however, given the consistency in self-

construal, as well as non-significant differences in scores on other individual difference measures including extraversion, optimism, affect intensity, and happiness, these groups were combined into one group of Asian North Americans for analyses. The group of European North Americans included 191 individuals who identified their ethnicity as European and reported primary identification with European or North American culture. Within this group, there were 142 women and 49 men, with an average age of 19.1 years. Data from 53 African American and Latino American respondents were excluded from analyses, as were data from 17 respondents who did not fit any of the cultural group categories described above. These individuals were predominantly Middle Eastern in ethnicity. Data from an additional 154 male and 366 female American respondents, with an average age of 19.1 years, could not be categorized by ethnicity. These respondents are identified as a "General American" sample for comparisons in which they are utilized, recognizing that this group likely contains more cultural variation as a Western sample than the European North American sample described above.

Materials and Procedure

Participants in each data collection completed a questionnaire package, consisting of several of the self-report measures described below. Appendix A lists the contents of the questionnaire package for each specific data collection. Given that the exchange program participants were required to exhibit a threshold level of competency in English to enroll in undergraduate level courses at the University of British Columbia, the measures were administered in English across the first few Japanese samples as for the North American participants. In addition, the measures were administered in Japanese to one Japanese sample, to examine whether language of administration would influence responses and to confirm adequate comprehension of the questionnaire items in English. To ensure accurate translation for this administration, the items were translated from English to Japanese by a

bilingually fluent research assistant, and then back-translated by a second research assistant. Areas of ambiguity were reviewed and clarified by additional bilingual assistants until the phrasing was agreed upon. There was no significant difference in age ($t(249) = .87$, p= .38) between the English and Japanese translation samples, although the translation sample had a greater proportion of female participants (88% vs. 70%, $\chi^2 = 4.64$, $p = .03$). With regard to the possible cultural priming influence of language, the Japanese translation sample reported lower levels of identification with European North American culture (4.94 vs. 5.92, $t(161) = 2.81$, $p < .01$). However, mean scores on identification with Japanese culture (7.21 vs. 7.64, $t(161) = 1.44$, $p = .15$) and independent and interdependent self construal were similar ($t(158) = -1.06$, $p = .29$; $t(158) = .86$, $p = .39$). Data for these samples were examined on a case-by-case basis by instrument, and pooled if no significant differences argued against it. These results are reported in the relevant section of analyses.

Specific items for each instrument are included in Appendix B. The Japanese translation of these measures is included in Appendix C.

Savoring Beliefs Inventory (SBI; Bryant, 2003). This scale comprises 24 statements that "reflect beliefs about one's capacity to enjoy positive events either through anticipating, savoring the moment, or reminiscing" (Bryant, 2003). Separate scales for each temporal savoring domain comprise 4 positively worded and 4 negatively worded items. Respondents are asked to indicate how true each statement is for them, using a 7-point scale with anchors of (*1) strongly disagree* and (*7) strongly agree*. Bryant found support for one dominant conceptual factor and two method factors underlying responses to the SBI, however a three conceptual factor model based on temporal focus provided a significant improvement in fit. This factor structure was consistent across samples and for both men and women. In addition, scores on each temporal domain have been found to correlate with behavioral measures of the corresponding savoring type (Bryant, 2003).

Attitudes About Savoring Scale (AASS). To explore relations between societal and cultural norms and values on the one hand and savoring behavior on the other, a newly designed measure tapping attitudes about the importance and value of enhancing positive feelings was administered. The pilot measure, labeled the *Attitudes About Savoring Scale*, mirrored the SBI, but asked participants to rate the extent to which they agreed with twenty items pertaining to the importance, value, or worth of savoring through anticipating, maximizing good feelings in the moment, or reminiscing. Of the original set of items, nine were negatively keyed. Responses on this measure were analyzed to determine a final item set for operationalizing savoring attitudes across groups.

Open-Ended Questions. Respondents were asked to nominate positive events and describe their own savoring strategies after completing the SBI and AASS, preceding administration of the structured WOSC strategy items.

Ways of Savoring Checklist (WOSC; Bryant, personal communication). Currently in the process of validation, the WOSC comprises 60 items pertaining to cognitive and behavioral responses in which individuals might engage when experiencing a positive event. In completing the WOSC, respondents rate the extent to which each item applies to their specific experience for the event they have been instructed to consider, on a 7-point scale ranging from (*1) definitely doesn't apply* to (*7) definitely applies*. Items can be combined to provide scores for 10 different types of savoring strategies. Four items on the WOSC do not load on any subscale. The results of reliability analysis for the WOSC subscales from the validation studies conducted to date are presented in Table 1. Cronbach's alphas range from .57 for the Thanksgiving subscale to .84 for the Temporal Awareness subscale, with 7 of the 10 subscales having Cronbach's alphas equal to or above .70 (Bryant, personal communication).

Table 1

Ways of Savoring Checklist (WOSC) Subscales and Constituent Items

WOSC Subscale (number of items)	Constituent Items	Cronbach's α
Sharing (6 items)	12, 26, 31, 32, 34, 53	.82
Memory Building (7 items)	5, 16, 20, 42, 43, 52, 56	.77
Self-Congratulation (7 items)	1, 2, 3, 4, 24, 25, 50	.77
Temporal Awareness (5 items)	13, 17, 38, 39, 55	.84
Behavioral Expression (6 items)	8, 21, 22, 29, 30, 33	.78
Comparing (7 items)	36, 37, 40, 47, 48, 49, 60	.70
Sensory-Perceptual Sharpening (4 items)	6, 7, 9, 44	.65
Absorption (4 items)	19, 23, 45, 58	.67
Thanksgiving (3 items)	11, 51, 59	.57
Kill-Joy Thinking (7 items)	18, 27, 28, 35, 41, 54, 57	.80
Unscored (4 items)	10, 14, 15, 46	---

Note. Cronbach's α is based on a sample of 275 undergraduates (193 females, 82 males), rating their most recent vacation.

As noted above, the items comprising the WOSC were culled from the predominantly Western established literature on affective functioning, and through surveying American undergraduate students with regard to their affect enhancement behaviors. From the identified savoring behaviors, several savoring strategies were identified and validated on American samples. This study represents the first administration of the WOSC to an East Asian cultural sample. At the same time, it provided an opportunity to survey individuals from East Asian cultural groups on their unstructured reports of savoring behavior, and potentially identify examples of culture-specific savoring strategies that might not have emerged in previous Western samples. Respondents were asked to complete the WOSC with reference to one of two positive events; either their most recent vacation (social/leisure) or the last time they got a good grade on a test or paper (personal achievement). After being directed to recall either their last vacation or good grade, participants were asked to rate this event in terms of several characteristics, including its rarity, duration, expectedness, desirability, and how much they were personally responsible for its occurrence. These ratings were made on 10-point scales, anchored from low to high levels of the characteristic in question. Participants also provided ratings of the intensity and duration of the enjoyment associated with the event, as well as the degree of anticipation they experienced, again on 10-point scales. After completing the 60 WOSC items, a subset of the sample rated the level and duration of the enjoyment they derived from the event a second time.

Happiness Measures (Fordyce, 1988). The Happiness Measures instrument consists of two self-report items: an 11-point scale evaluating intensity of happiness; and a tripartite estimate of the percentage of time spent in happy, unhappy, and neutral moods. These two elements provide measures of frequency and intensity of affect. The scale contains anchoring descriptions at each point to increase cross-comparability of subject response (Fordyce, 1988). From the measure, the scale score and percentage estimates are used as raw scores,

and can be combined in equal weights to calculate a combination score. The combination score and raw scores have been shown to have good test-retest reliability (from .98 over two days to .81 over one month; Fordyce, 1988) while at the same time showing sensitivity to short-term change. The measure has demonstrated strong and consistent convergent validity with several recognized happiness and well-being instruments, and strong relations with personality characteristics indicative of mental health; it also discriminates between happy and unhappy groups. Little discrimination in response due to gender, age, or race has been identified (Fordyce, 1988).

Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999). The SHS is a 4-item scale of global subjective happiness. Respondents were asked to rate themselves on a 7-point scale in terms of their general happiness, their happiness relative to peers, and the extent to which descriptions of happy and unhappy individuals characterize them. The SHS has been shown to have high internal consistency across samples ranging from high-school students to older adults. Reliability has been confirmed with test-retest and self-peer correlations. Studies of convergent and discriminant validity have supported the use of the scale as a measure of subjective happiness. In addition to the four scale items, participants administered this measure were asked to rate their level of happiness over the past week on a similar 7-point scale.

Self-Construal Scale (SCS; Singelis, 1994). The Self-Construal Scale assesses the dimensions of independence and interdependence in self-image as described by Markus and Kitayama (1991a). The scale comprises 24 items to which respondents are asked to indicate their agreement on a 5-point scale with anchors of (*1) strongly disagree* and (*5) strongly agree*. Confirmatory factor analysis within multiethnic samples of college students supported two distinct dimensions of Independence and Interdependence. As predicted from theory, Singelis (1994) found mean Interdependence scores for Asian-Americans to be significantly

higher than those for Caucasian-Americans, whereas scores on Independence were significantly higher for Caucasian-Americans than Asian-Americans. This finding has been replicated in several other studies (for a review, see Oyserman et al., 2002).

Eysenck Personality Inventory (EPI; Eysenck & Eysenck, 1975). The Eysenck Personality Inventory measures two pervasive, independent dimensions of personality, Extraversion-Introversion and Neuroticism-Stability, which account for most of the variance in the personality domain. The entire inventory contains fifty-seven "Yes-No" items with no repetition of items. These items comprise three scales, measuring the traits of Extraversion and Neuroticism, as well as the tendency toward response distortion. The inventory and the individual scales have demonstrated test-retest reliabilities ranging from .80 to .97 as well as well established concurrent and construct validity across numerous studies. Watson (2000) reviewed several studies linking these traits with positive and negative affect. As positive affect has repeatedly been shown to have a strong link with extraversion but to be largely independent of neuroticism, only the 23-item Extraversion scale was used here. Results from cross-cultural administrations, including studies that utilized translated versions of the measure, suggested that the degree of factor identity between national and cultural groups supported the use of the measure for cross-cultural comparisons of extraversion (Eysenck, 1986).

Big Five Inventory (BFI-44; John, Donahue & Kentle, 1991). The BFI-44 is a 44-item personality inventory, comprising 5 personality traits (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience). Respondents were asked to rate the degree to which each item accurately describes them, on a 5-point scale ranging from *(1) strongly disagree* to *(5) strongly agree*. The items include both positive and negative trait descriptors, the latter being rekeyed before calculating subscale scores for each of the 5 traits. In North American samples, the reliability alpha of the BFI typically averages greater than

.80, with a three-month test-rest reliability mean of .85 (John & Srivastava, 1999). There is evidence to support the use of the measure in non-Western cultures, with generally similar factor structure, although support is somewhat weaker for the Openness to Experience subscale (John & Srivastava, 1999; Cross & Markus, 1999).

Affect Intensity Measure (AIM; Larsen & Diener, 1987). This scale comprises 40 items assessing the characteristic magnitude or intensity with which an individual experiences emotional responses. Respondents were asked to rate the items on a 6-point scale, ranging from *(1) never* to *(6) always*, in terms of how they react to the typical life events mentioned. Eleven of the items are written in the reversed direction. The items pertain to both positive and negative emotional feelings, and survey intensity across a variety of domains, including subjective experience, bodily responses, and cognitive performance. During psychometric validation of the measure, second order factoring supported one major dimension underlying the 40 items, with a Cronbach's alpha of .90 to .94 across four separate samples. The measure is scored by rekeying the reversed items and averaging across the item set. The measure has evidenced test-retest reliabilities of .81 for a 3-month interval to .75 for scores separated by 2 years. Scores on the AIM have been found to reflect more than simply an extreme response style, and to relate to relevant behavioral measures, as well as indicators of variability in emotional life. Individuals high on affect intensity appear to seek out and prefer emotional stimulation. Across the life span, women tend to score higher on the measure than men (Larsen & Diener, 1987).

Life Orientation Test (LOT; Scheier & Carver, 1985). As a measure of dispositional optimism, the Life Orientation Test comprises 8 items which focus on generalized outcome expectancies along with 4 filler items included to reduce the transparency of the scale's purpose. Respondents were asked to indicate the extent to which they agreed with each item on a 5-point scale ranging from *strongly disagree* to *strongly agree*. Half of the items are

negatively worded and reversed prior to scoring. Factor analyses provided reasonable support for a single dimension underlying the scale, with a Cronbach's alpha of .76. Test-retest reliability for a 4-week interval was .79. Findings have provided evidence for convergent and discriminant validity, and only minimal differences associated with gender (Scheier & Carver, 1985). This scale and the revised versions have been used to measure dispositional optimism in East Asian samples (e.g., Chang, 1996; Ji, Zhang, Usborne, & Guan, 2004).

Change Scenarios (Ji et al., 2001). Participants were presented with three of the scenarios utilized by Ji et al. (2001) to measure beliefs about change. These scenarios briefly describe a situation and ask participants to rate the likelihood of the situation changing at a future time. Ji et al. found that Chinese respondents endorsed higher mean likelihoods of change than European North Americans. The percentages for the three scenarios were averaged to compute a single change score.

Reminiscing Questions. Respondents in one sample were asked to provide information with respect to how, when, and why they reminisce, by rating responses previously identified by Bryant. These ratings were made on a 10-point scale ranging from 1 (not at all) to 10 (a great deal).

Demographic Information. Respondents were asked to provide demographic information, including their age, gender, ethnicity and cultural influences, as well as to rate the extent of their identification with their nominated culture and European North American culture, respectively, on 10-point scales.

Data Analysis Outline

Savoring was examined in terms of both respondents' beliefs about their capacity to savor (SBI) and their attitudes about the importance of savoring (AASS). As operationalized by the two measures, ideas about what one does and what one should do with respect to

enhancing positive feelings were expected to be strongly related but not identical.

Confirmatory factor analysis was utilized to test for measurement invariance (equivalence) in the SBI, following the recommended sequential testing procedure identified by Vandenberg and Lance (2000) and Steenkamp and Baumgartner (1998). This method identifies testing the equality of the covariance matrices as an initial omnibus test for determining whether the measure in question functions equivalently across the groups, with further tests following if equality is not supported. In the absence of equality of the covariance matrices, the next step is to test for configural invariance, which examines equivalence of the factor structure across groups. If a reasonable fit is supported, the next step is to examine the equivalence of factor loadings by testing for metric invariance. A finding of at least partial metric invariance allows for testing of scalar invariance of the metrically invariant items to speak to the equivalence of the item intercepts. However, Vandenberg and Lance (2000) noted that testing of intercept invariance may not be conceptually warranted in situations where it is hypothesized that group differences in the construct of interest exist. In such cases, differences in item location parameters represent expected group differences, rather than response biases. Therefore, for the current analysis, invariance analysis was restricted to the configural and metric level. Various standards have been suggested for implementation of partial invariance constraints, ranging from conservative to liberal. Both Steenkamp and Baumgartner (1998) and Byrne (1998) recommend that comparisons of latent means across groups are viable as long as at least 1 item per factor exhibits metric invariance in addition to the referent indicator. The remaining noninvariant measures can then be freely estimated. Group differences can also be tested on observed means, lacking the correction for measurement error.

Because the AASS is a newly constructed measure, confirmatory factor analysis was used to test the comparative fit of two models derived from the theory behind its construction

parallel to the SBI, with the aim of determining a reasonable and sufficient model for operationalizing savoring attitudes. Confirmatory factor analysis was also used in a post-hoc capacity for model refinement (Byrne, 1998). Parameter estimates were used to identify AASS items that accounted for very little proportion of the variance in responses. These items were dropped and the resulting core subset was re-analyzed as a post-hoc model, and formed the basis of the preliminary Attitudes measure.

Pearson bivariate correlations were utilized to measure relations between savoring and related constructs of interest. Planned comparisons were conducted to test for predicted differences in reported savoring capacity by culture and gender. Mediation analysis (see Baron & Kenny, 1986; Kenny, Kashy, & Bolger, 1998; Preacher & Hayes, in press) was utilized to investigate the role that the selected cultural variables might play in mediating the relation between culture and savoring.

To examine cultural differences in the types of events associated with positive affect, respondents' self-nominated positive events were coded for focus and content by raters blind to the research hypotheses and to culture group membership. Chi-square tests were conducted to test for differences in percentages across the categories. A similar procedure was used to examine cultural differences in respondents' self-nominated savoring strategies. Differences in savoring strategies were also examined through planned comparisons of scores on the WOSC subscales.

Results

Research Question 1: Is the construct of savoring conceptually similar across cultures?

For these measurement invariance analyses, SBI scores from 163 Japanese, 262 Asian North American, 187 European North American and 520 General American respondents were analyzed with confirmatory factor analysis using LISREL 8.51. Given that Bryant (2003) found support for a 5 factor model (3 conceptual factors and 2 method factors) containing a total of 76 estimated parameters (i.e., 43 factor loadings, 5 factor variances, 4 factor intercorrelations, and 24 measurement errors), the Japanese and Asian North American data were combined to allow one larger sample of Asian participants ($n = 425$), which yielded a ratio sample size to number of estimated parameters within the recommended range of 5-10 (Kline, 1998) for configural analyses. The European North American and General American data were similarly pooled. Inspection of the descriptive statistics for the SBI items revealed some nonnormality in terms of skewness and kurtosis in both the pooled Asian and pooled North American samples (see Table 2). To address this nonnormality, the Satorra-Bentler scaled $\Delta\chi^2$ was used (Satorra & Bentler, 1994). The Satorra-Bentler scaled $\Delta\chi^2$ corrects for distortion in standard errors in parameter estimates, *p* values, and goodness-of-fit chi-square values due to nonnormality in measured variables.

The omnibus test of the equality of the covariance matrices resulted in poor fit ($\chi^2(300) = 833.19$, $p < .001$), and indicated further tests of measurement invariance were warranted.

SBI Configural Invariance

The next step in the invariance analysis was to test for equivalent factor structure. Following from Bryant (2003), scores on the Savoring Beliefs Inventory for Japanese and Asian North American participants were predicted to support a five-factor model, reflecting

Table 2

Descriptive Data for Savoring Beliefs Inventory (SBI) Items for Pooled North American and Pooled Asian Samples

| SBI | pooled North American | | | | | pooled Asian | | | | |
---	N	Mean	SD	Skew[a]	Kurtosis[b]	N	Mean	SD	Skew[c]	Kurtosis[d]
Item 1	704	5.54	1.25	-.84	.51	425	5.20	1.28	-.80	.67
Item 2	704	5.06	1.56	-.70	-.25	425	4.26	1.54	-.25	-.75
Item 3	702	6.17	1.11	-1.77	3.64	425	5.51	1.37	-.89	.47
Item 4	704	4.86	1.65	-.47	-.68	425	4.42	1.66	-.21	-.82
Item 5	700	5.55	1.24	-.99	1.03	425	4.65	1.36	-.35	-.35
Item 6	704	5.93	1.27	-1.45	1.95	425	5.07	1.53	-.62	-.37
Item 7	704	5.93	1.13	-1.24	1.74	425	5.30	1.20	-.88	1.04
Item 8	701	5.29	1.75	-.83	-.33	425	4.48	1.66	-.24	-.69
Item 9	704	5.55	1.40	-1.08	.88	425	4.92	1.52	-.60	-.24
Item 10	704	5.87	1.37	-1.41	1.59	425	5.11	1.45	-.55	-.26
Item 11	703	4.86	1.43	-.49	-.16	424	4.57	1.29	-.26	-.02
Item 12	702	5.05	1.73	-.57	-.77	424	4.61	1.57	-.15	-.88
Item 13	703	4.85	1.60	-.64	-.30	424	4.52	1.45	-.47	-.37
Item 14	702	5.91	1.40	1.52	1.91	424	4.83	1.59	-.54	-.32
Item 15	703	5.68	1.39	-1.21	1.20	424	5.08	1.40	-.52	-.35
Item 16	704	5.59	1.47	-1.13	.70	424	4.67	1.57	-.46	-.56
Item 17	704	5.77	1.23	-1.20	1.55	424	4.96	1.47	-.60	-.23
Item 18	703	6.21	1.14	-1.94	4.10	424	5.32	1.51	-.86	.23

Table 2 (continued)

SBI	pooled North American					pooled Asian				
	N	Mean	SD	Skew[a]	Kurtosis[b]	N	Mean	SD	Skew[c]	Kurtosis[d]
Item 19	702	5.23	1.43	-.74	.14	424	4.89	1.24	-.51	.37
Item 20	704	5.11	1.68	-.64	-.56	424	4.41	1.60	-.17	-.85
Item 21	702	5.34	1.38	-.84	.32	424	4.70	1.25	-.39	.13
Item 22	703	5.81	1.44	-1.45	1.60	424	5.00	1.43	-.51	-.35
Item 23	703	5.60	1.37	-1.04	.68	424	4.82	1.44	-.38	-.61
Item 24	703	6.19	1.15	-1.87	3.84	424	5.40	1.40	-.89	.54
Valid N listwise	685					424				

Note. Even-numbered items were reverse scored.

[a] Standard error was .092. [b] Standard error was .185 for Item 5, .184 for all other items.
[c] Standard error was .118 for Items 1 – 10, .119 for Items 11 – 24. [d] Standard error was .236 for Items 1 – 10, .237 for Items 11 – 24.

beliefs about savoring capacity across the three separate temporal domains of anticipating, savoring in the moment, and reminiscing, with two additional method factors. Likelihood-ratio tests of differences in scaled $\Delta\chi^2$ values between nested models were computed using the scaling correction provided by Muthen and Muthen (2003).

The model's goodness of fit was assessed using five criteria (Hu & Bentler, 1998). Three criteria represent measures of absolute model fit: the root mean square error of approximation (RMSEA; Steiger, 1990), the standardized root mean square residual (SRMR; Jöreskog & Sörbom, 1996), and the goodness of fit index (GFI; Jöreskog & Sörbom, 1996). Two criteria represent measures of relative model fit: the nonnormed fit index (NNFI; Bentler & Bonett, 1980) and the comparative fit index (CFI; Bentler, 1990). For RMSEA and SRMR, smaller values reflect better model fit. Hu and Bentler (1998) recommended a cutoff value close to .08. For RMSEA, Browne and Cudeck (1993) identified values of $\leq.05$ as representing "close fit", and values between .05 and .08 as "reasonably close fit." For GFI, NNFI, and CFI larger values represent better model fit, with values of .90 or above generally recommended (Bentler & Bonett, 1980).

Results supported the five-factor model (Anticipating, Savoring the Moment, Reminiscing, Positive Method, Negative Method) as a reasonable representation for both the pooled North American and Asian data. By all five statistical criteria, the five-factor model provided an acceptable goodness-of-fit to the SBI data for the pooled North American sample (see Table 3). By three of the five criteria (RMSEA, SRMR, and CFI) the model provided an acceptable fit to the SBI data for the pooled Asian sample. The remaining criteria, GFI & NNFI, fell just below the recommended .90 threshold of acceptability for the Asian sample (both .88). Contrasts of nested models suggested that the five-factor model was a statistically significant improvement in goodness-of-fit over each of the other four CFA models for both samples, with all likelihood ratio tests $p < .001$. As well, the five-

Table 3

Goodness-of-fit Statistics for CFA Measurement Models of the SBI for Pooled North American (N=685) and Asian (N=424) Samples.

CFA Model	Sample	Scaled χ^2	df	Measure of Model Fit				
				RMSEA	SRMR	GFI	NNFI	CFI
1 Global Factor	NA	2478.33	252	.11	.09	.65	.70	.72
(SBI Total Score)	Asian	1421.12	252	.11	.10	.69	.62	.65
2 Method Factors	NA	1899.51	251	.10	.08	.70	.76	.78
(Positive, Negative)	Asian	1080.27	251	.09	.08	.74	.70	.73
3 Factors								
(Global SBI total score,	NA	969.61	227	.07	.05	.82	.85	.88
Positive, Negative)	Asian	687.45	227	.07	.06	.82	.78	.82
3 Temporal Factors								
(Anticipating, Savoring the	NA	1737.33	249	.09	.08	.73	.78	.80
Moment, Reminiscing)	Asian	1135.54	249	.09	.09	.74	.71	.74
5 Factors								
(Anticipating, Savoring the	NA	447.26	224	.04	.05	.91	.92	.94
Moment, Reminiscing,								
Positive, Negative)	Asian	411.17	224	.05	.05	.88	.88	.90

Note. Scaled χ^2 refers to the Satorra-Bentler scaled χ^2 statistic (Satorra & Bentler, 1994), which adjusts the goodness-of-fit χ^2 value, standard errors of parameter estimates, and p values for distortion due to nonnormality in measured variables. RMSEA = root mean square error of approximation (Steiger, 1990). SRMR = standardized root mean square residual (Jöreskog & Sörbom, 1996). GFI = goodness-of-fit index (Jöreskog & Sörbom, 1996). NNFI = non-normed fit index (Bentler & Bonett, 1980). CFI = comparative fit index (Bentler, 1990).

factor model explained a sizeable proportion of the variance in individual SBI items for both samples. In the pooled North American sample, the overall mean R^2 was .56; in the pooled Asian sample the overall mean R^2 was .47. These findings suggest that, similar to European North Americans, East Asian individuals make distinctions in their beliefs about their capacity to enhance positive feelings in terms of Anticipating, Savoring the Moment, and Reminiscing.

SBI Metric Invariance

Given adequate configural invariance, the next step was to test for equality of factor loadings. An omnibus test of the equality of factor loadings for the five-factor SBI model across the two cultural groups revealed a statistically significant overall difference in the magnitude of factor loadings, $\Delta\chi^2$ (43) = 322.59, $p < .001$. Separate tests of invariance by factor indicated that Anticipating, $\Delta\chi^2$ (7) = 28.30, $p < .001$, Savoring the Moment, $\Delta\chi^2$ (7) = 35.36, $p < .001$ and Reminiscing, $\Delta\chi^2$ (7) = 29.56, $p < .001$ all showed significant differences in factor loadings. Tests of the invariance of individual factor loadings on the 3 factors revealed that 7 SBI factor loadings were invariant across the cultural groups: 3 invariant loadings for Anticipation (SBI Items 4, 10, 19), 1 invariant loading for Savoring the Moment (SBI Item 2), and 3 invariant loadings for Reminiscing (SBI Items 9, 15, 24). Overall the measure met minimal partial invariance standards for Savoring the Moment, and exceeded these standards for the other 2 factors, with one-third of the total unconstrained factor loadings metrically invariant. A test of the partially invariant CFA model showed it to fit the SBI data for the pooled North American and Asian groups equally well compared to a model that estimated all factor loadings separately for each sample, $\Delta\chi^2(26) = 14.95$, $p > .05$.

Convergent and Discriminant Validity

In the process of validating the SBI, Bryant (2003) hypothesized and found significant relations between savoring beliefs and several measures of individual differences

and subjective adjustment in his American samples. Following his approach, I constructed four scores from the SBI items to examine similar relations within the Japanese and Asian North American samples. For each participant, SBI mean total score was computed by reverse-keying the 12 negatively valenced items before averaging across the total set of 24 items. Mean scores for separate subscales of Anticipating, Savoring the Moment, and Reminiscing were computed by averaging the 4 positive and 4 rekeyed items within each subscale. Using these scores, I examined whether beliefs about savoring capacity reported by Japanese and Asian North American participants were significantly correlated in the predicted direction with selected measures of individual differences and subjective adjustment similar to those examined in Bryant's American samples. I also examined relations between beliefs about savoring capacity and several variables that were expected to be associated with cultural differences, including self-construal, beliefs about change, and cultural identification; those results are reported under Research Question 2. Before proceeding with the analyses, responses on the larger multi-item scales were compared by language of administration in the Japanese sample, to rule out any systematic differences that might argue against pooling the data. Although Japanese participants who completed the Affect Intensity Measure in Japanese reported a higher mean score than Japanese respondents who were administered the measure in English (3.83 vs. 3.38, $t(126) = -4.34, p < .001$), there was no significant difference in variance between the samples, $F(1,126) = .143, p = .71$). Cronbach's alphas for the two samples were also comparable (.88 vs. .90), suggesting adequate scale reliability. Therefore, the data were pooled for analyses ($n = 129$). Similarly, Japanese participants who completed the Eysenck Extraversion Scale in Japanese scored lower than those who completed it in English (35.88 vs. 33.09, $t(126) = 2.57, p = .01$), but again similar variances, $F(1,126) = .77, p = .38$, and scale reliability (Cronbach's alpha .73 and .70) supported pooling the samples. There were no significant differences in scores on

the Life Orientation Test by language of administration ($t(126) = .09, p = .93$). Data from

187 European North American participants were available for comparison and confirmation

of Bryant's previously documented findings.

   Individual differences. Table 4 presents the correlation coefficients relating the SBI

to the individual difference and subjective adjustment measures in the three samples.

Replicating and extending Bryant (2003), SBI total score and scores on the Savoring the

Moment and Reminiscing subscales were positively correlated with affect intensity,

optimism, and extraversion in all three samples. Scores on the Anticipating subscale were

also positively correlated with optimism in all three samples, with affect intensity in the

Japanese and Asian North American samples, and with extraversion in the Japanese sample.

Amongst the smaller set of Japanese and Asian North American participants who completed

the Big Five Inventory, SBI Total score and subscale scores were positively correlated with

agreeableness. Neuroticism was negatively correlated with scores on the Savoring the

Moment subscale for both Japanese and Asian North Americans, and also negatively

correlated with SBI Total score and Anticipating subscale in the Asian North American

sample. There was no significant correlation between Neuroticism and Reminiscing for

either group.

   Bryant (2003) reported a main effect for gender in his samples, such that women

scored higher on the SBI Total score and all 3 SBI subscales. Multivariate analysis of

variance (MANOVA) was used to test for gender differences across the three cultural groups.

A significant main effect of gender was found, omnibus $F(4, 602) = 12.83, p < .001$. As

predicted, women had higher mean scores than did men on SBI total score ($F(1, 605) =$

$37.45, p < .001$), and on the subscales of Anticipating ($F(1, 605) = 20.76, p < .001$), Savoring

the Moment ($F(1, 605) = 12.66, p < .001$), and Reminiscing ($F(1, 605) = 51.14, p < .001$).

This pattern was similar across Japanese and Asian North Americans as in European North

Table 4

Relations Between Beliefs About Savoring Capacity and Measures of Individual Differences and Subjective Adjustment

			SBI Score			
Measure	Group	n	Total	Anticipating	Moment	Reminiscing
I. Individual Differences						
1. Affect Intensity (AIM)						
	Japanese	128	.433**	.432**	.299**	.344**
	Asian NA	202	.254**	.137*	.251**	.251**
	European NA	178	.233*	.121	.262**	.212*
2. Optimism (LOT)						
	Japanese	128	.393**	.337**	.400**	.248*
	Asian NA	203	.325**	.189*	.347**	.286**
	European NA	176	.357**	.154*	.429**	.345**
3. Extraversion (Eysenck)						
	Japanese	128	.356**	.291**	.387**	.215*
	Asian NA	203	.278**	.109	.352**	.236**
	European NA	175	.349**	.112	.508**	.243*
4. Extraversion (BFI-E)						
	Japanese	32	.350*	.151	.621**	.177
	Asian NA	58	.247*	.165	.361*	.075
	European NA	3[a]	-	-	-	-
5. Neuroticism (BFI-N)						
	Japanese	32	-.107	.076	-.406*	.006
	Asian NA	58	-.265*	-.253*	-.391*	-.001
	European NA	3[a]	-	-	-	-
6. Agreeableness (BFI-A)						
	Japanese	32	.396*	.382*	.395*	.238
	Asian NA	58	.427**	.349*	.403*	.291*
	European NA	3[a]	-	-	-	-

Table 4 (continued)

Measure	Group	n	SBI Score			
			Total	Anticipating	Moment	Reminiscing

II. Subjective Adjustment

13. Happiness Intensity (FHS)

	Japanese	128	.375**	.250**	.385**	.308**
	Asian NA	203	.215*	.098	.326**	.121*
	European NA	178	.418**	.177*	.548**	.345**

14. Percent of time Happy (FHS)

	Japanese	128	.376**	.289**	.295**	.353**
	Asian NA	203	.361**	.187*	.460**	.264**
	European NA	178	.502**	.251**	.604**	.427**

15. Percent of time Unhappy (FHS)

	Japanese	128	-.256*	-.117	-.323**	-.209*
	Asian NA	203	-.194*	-.117*	-.284**	-.094
	European NA	177	-.369**	-.214*	-.456**	-.267**

16. Percent of time in Neutral Mood (FHS)

	Japanese	128	-.191*	-.222*	-.036	-.209*
	Asian NA	203	-.246**	-.109	-.284**	-.222*
	European NA	177	-.276**	-.146*	-.313**	-.262**

17. Combined Intensity & Frequency of Happiness (FHS)

	Japanese	128	.405**	.291**	.367**	.357**
	Asian NA	203	.317**	.157*	.431**	.213*
	European NA	178	.508**	.238*	.636**	.427**

18. Happiness Over Past Week

	Japanese	32	.315*	.096	.411*	.321*
	Asian NA	58	.398*	.269*	.455**	.248*
	European NA	-	-	-	-	-

Table 4 (continued)

Measure	Group	n	SBI Score			
			Total	Anticipating	Moment	Reminiscing
19. General Happiness (SHS)						
	Japanese	32	.412*	.181	.539*	.360*
	Asian NA	58	.523**	.308*	.673**	.294*
	European NA	-	-	-	-	-

Note. To account for the large number of correlations examined within each cultural sample, a Bonferroni correction was applied to the desired p-value (.05), resulting in a significance level that corrected for Type I error (p<0.0003).

[a] Sample size not large enough to allow for computation.

* p<.05, one-tailed unadjusted. ** p<.05, one-tailed Bonferroni adjusted (p<.0003)

Americans, with no interaction between gender and cultural group ($F(8, 1,206) = .81, p = .60$).

Subjective adjustment. Several measures of subjective adjustment were available for examination. These included ratings of positive, negative, and neutral feelings in the past week, as well as more general levels of happiness. With one exception, all of these measures correlated in the predicted direction with SBI Total score and the Savoring the Moment subscale. The one exception was that percentage of time over the past week spent in a neutral mood state did not significantly correlate with scores on Savoring the Moment for Japanese participants, although it did significantly correlate with overall SBI Total score, Anticipating, and Reminiscing. This was a significant difference compared to the correlation for European North Americans (-.04 vs. -.31, Fisher's $z = 2.37, p = .01$). As reported by Bryant (2003), the correlations were generally strongest with the Savoring the Moment subscale. Although there was a significant negative correlation between time spent in an unhappy mood state and both SBI Total Score and Savoring the Moment subscale score in Asian North Americans, there was a trend for these correlations to be lower in magnitude than those found in European North Americans (-.19 vs. -.37, $p = .06$; -.28 vs. -.46, $p = .05$). Multivariate analysis of variance (MANOVA) revealed a main effect of cultural group on subjective adjustment, omnibus $F(8, 1,022) = 7.36, p < .001$ with Pillai's criteria. Univariate analysis of variance demonstrated that this effect held both with measures of positive and negative mood. Pairwise comparisons using Dunnett C to correct for alpha inflation demonstrated that, as predicted, European North Americans reported higher levels of happiness in the past week than did Asian North Americans (6.89 vs. 6.17, $p < .05$) and Japanese (6.89 vs. 5.21, $p < .05$). They also identified a greater percentage of time spent in a positive mood than did Japanese (51% vs. 39%, $p < .05$) and Asian North Americans (51% vs. 44%, $p < .05$) (see Figure 1). Asian North Americans (23%) were similar to European
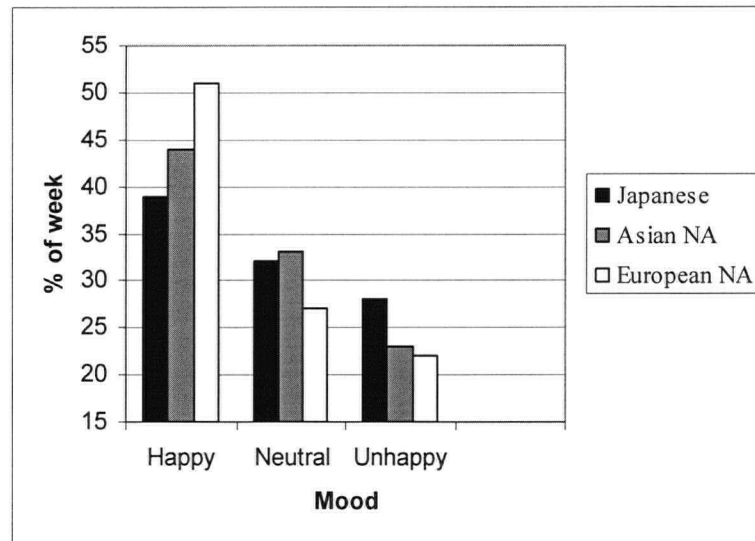
Figure 1. Reported mood states over past week.

North Americans (22%) in reporting less time spent in a negative mood than Japanese (28% vs. 23%, $p < .05$; 28% vs. 22%, $p < .05$) but similar to Japanese in reporting more time spent in a neutral mood (33% and 32%) than European North Americans (27% vs. 33%, $p < .05$; 27% vs. 32%, $p < .05$).

Attitudes about savoring importance. A scale was constructed to measure attitudes about savoring separately from beliefs about capacity to savor, in order to examine how differences in norms and values pertaining to savoring might contribute to cultural differences in the enhancement of positive feelings. The *Attitudes About Savoring Scale* (AASS) was designed to parallel the *Savoring Beliefs Inventory* with items pertaining to the importance, utility, and value of Anticipating, Savoring the Moment, and Reminiscing. As noted above, given that this is a new measure, confirmatory factor analysis with LISREL 8.51 was used to evaluate the goodness-of-fit of the three-factor (1 general conceptual plus 2 method factors) and five-factor (3 conceptual plus 2 method factors) models that Bryant (2003) reported as exhibiting reasonably good fit for the SBI in his validation samples. For

comparison, I also tested one- and three-factor models without the inclusion of method factors, and a two-factor model that included only the method factors. AASS item scores from 163 Japanese, 262 Asian North American, and 187 European North American respondents were analyzed. Missing values resulted in samples sizes of 163, 258, and 180. I note that these sample sizes are smaller than recommended for the larger measurement models, reducing the statistical power of these analyses. In addition, preliminary inspection of the descriptive statistics for the AASS items revealed mild nonnormality in the data in terms of skewness and kurtosis (see Tables 5 & 6). Because asymptotic covariance matrices could not be computed given the sample sizes, corrections for nonnormality were not available. Nonnormality in data can lead to underestimates in standard error and to the appearance of worse fit in the CFA models (Tabachnick & Fidell, 2001).

Once again, five criteria were used to assess each model's goodness of fit for the data by sample: RMSEA, SRMR, GFI, NNFI, and CFI (Hu & Bentler, 1998). The results of the analyses are presented in Table 7. Addition of the method factors resulted in improvement in fit with both the one- and three- conceptual factor models. The resulting three- and five-factor models resulted in very similar fit indices across the European North American and Asian North American samples, with little improvement in fit gained by grouping the items by Anticipating, Savoring the Moment, and Reminiscing. Within the Japanese sample, the more parsimonious three-factor (1 General Attitude plus Positive Method and Negative Method) model resulted in a slightly better fit than the five-factor model, with higher NNFI and CFI values, and lower SRMR. RMSEA and GFI scores remained at the same level. For all samples, this model resulted in SRMR levels below the cutoff of .10 and GFI levels at or above .80.

Table 5

Descriptive Data for Attitudes About Savoring Scale (AASS) Items for the Japanese and Asian North American Samples

AASS	Japanese					Asian North American				
	N	Mean	SD	Skew[a]	Kurtosis[b]	N	Mean	SD	Skew[c]	Kurtosis[d]
Item 1	163	4.76	1.37	-.46	-.01	261	5.21	1.21	-.36	.15
Item 2	163	4.68	1.26	-.31	-.11	261	4.88	1.13	-.18	.03
Item 3	163	5.12	1.49	-.86	.61	261	5.25	1.48	-.83	.23
Item 4	163	4.22	1.74	-.05	-1.04	260	4.21	1.49	-.01	-1.93
Item 5	163	5.15	1.25	-.55	1.04	261	5.43	1.24	-.72	.30
Item 6	163	3.77	1.41	.16	-.16	261	3.44	1.43	.15	-.22
Item 7	163	4.23	1.49	-1.35	-.48	261	4.62	1.38	-.39	.08
Item 8	163	4.43	1.24	-.47	.60	262	5.10	1.18	-.58	.74
Item 9	163	4.59	1.11	-.52	.89	262	4.91	1.14	-.47	.60
Item 10	163	4.65	1.47	-.42	-.21	262	4.64	1.50	-.18	-.77
Item 11	163	5.59	1.25	-.35	.29	262	4.92	1.26	-.69	.60
Item 12	163	4.04	1.49	.08	-.73	262	3.97	1.47	.07	-.60
Item 13	163	5.28	1.30	-.95	1.43	262	5.41	1.11	-.41	-.42
Item 14	163	4.79	1.22	-.47	.18	261	4.74	1.32	-.35	-.30
Item 15	163	4.22	1.51	-.01	-.52	262	3.90	1.52	-.09	-.61
Item 16	163	4.80	1.42	-.39	-1.15	262	5.01	1.59	-.70	-.22
Item 17	163	4.21	1.61	-.02	-.79	262	5.21	1.55	.09	-.52
Item 18	163	4.97	1.43	-.87	.68	262	4.88	1.31	-.66	-.01
Item 19	163	4.76	1.37	-.33	-.02	262	5.25	1.18	-.47	.51
Item 20	163	4.68	1.53	-.19	.11	262	4.21	1.58	-.18	-.77
Valid N listwise	163					258				

Note. Items 3, 4, 6, 10, 12, 15, 17, 18, and 20 were reverse scored.
[a] Standard error was .190 for all items. [b] Standard error was .378 for all items. [c] Standard error was .151 for Items 1-7 & 14, .150 for all other items. [d] Standard error was .301 for Item 4, .300 for all other items.

Table 6

Descriptive Data for Attitudes About Savoring Scale (AASS) Items for the European North American Sample

| AASS | European North American | | | | |
	N	Mean	SD	Skew[a]	Kurtosis[b]
Item 1	185	5.18	1.284	-.442	-.104
Item 2	185	4.96	1.267	-.391	-.105
Item 3	185	6.01	1.177	-1.729	3.478
Item 4	184	5.20	1.547	-.574	-.765
Item 5	185	5.98	.994	-1.084	1.735
Item 6	185	3.95	1.309	.037	.368
Item 7	184	4.12	1.533	-.433	-.321
Item 8	185	5.61	1.228	-1.045	1.312
Item 9	185	4.95	1.223	-.258	-.333
Item 10	185	5.67	1.411	-1.085	.307
Item 11	183	5.34	1.171	-.919	1.375
Item 12	185	4.92	1.663	-.524	-.513
Item 13	185	5.88	1.049	-.797	.364
Item 14	185	5.50	1.189	-.565	-.163
Item 15	185	4.98	1.461	-.362	-.648
Item 16	185	5.81	1.276	-1.426	2.571
Item 17	185	4.59	1.685	-.300	-.557
Item 18	184	6.03	1.142	-1.610	3.092
Item 19	185	4.64	1.437	-.552	.012
Item 20	185	5.63	1.544	-1.173	.695
Valid N (listwise)	180				

Note. Items 3, 4, 6, 10, 12, 15, 17, 18, and 20 were reverse scored.
[a] Standard error was .179 for all items. [b] Standard error was .357 for Item 11, .356 for Items 4, 7, & 18, and .355 for all other items.

Table 7

Goodness-of-fit Statistics for CFA Measurement Models of the Attitudes About Savoring Scale (AASS) for the Japanese (N = 163), Asian North American (N = 258) and European North American (N = 180) Samples

CFA Model	Sample	Scaled χ^2	df	Measure of Model Fit				
				RMSEA	SRMR	GFI	NNFI	CFI
1 Global Factor (AASS Total Score)	Japanese	603.10	171	.13	.11	.73	.54	.59
	Asian NA	922.69	171	.16	.13	.68	.48	.53
	European NA	771.17	171	.16	.11	.66	.63	.67
2 Method Factors (Positive, Negative)	Japanese	532.41	170	.11	.10	.76	.61	.66
	Asian NA	634.49	170	.10	.10	.80	.68	.71
	European NA	612.11	170	.12	.09	.74	.73	.76
3 Factors (Global AASS, Positive, Negative)	Japanese	417.63	149	.10	.08	.80	.74	.67
	Asian NA	488.18	151	.09	.09	.85	.74	.79
	European NA	465.38	151	.10	.08	.80	.79	.84
3 Temporal Factors (Anticipating, Savoring the Moment, Reminiscing)	Japanese	593.39	168	.13	.11	.73	.54	.60
	Asian NA	906.51	168	.16	.13	.67	.48	.54
	European NA	713.85	168	.15	.11	.67	.66	.70

Table 7 (continued)

| CFA Model | Sample | Scaled χ^2 | df | Measure of Model Fit | | | | |
				RMSEA	SRMR	GFI	NNFI	CFI
5 Factors	Japanese	404.63	148	.10	.09	.81	.69	.76
(Anticipating, Savoring the Moment,	Asian NA	469.94	148	.08	.09	.85	.74	.80
Reminiscing, Positive, Negative)	European NA	403.97	148	.09	.09	.83	.80	.86
	Japanese	261.89	87	.11	.07	.83	.73	.81
3 Factors	Asian NA	266.37	87	.08	.06	.89	.81	.87
(16-item AASS score,	European NA	286.46	87	.10	.06	.84	.83	.88
Positive, Negative)	All samples	194.27 / 117.92[a]	87	.04	.04	.91	.90	.93

Note. RMSEA = root mean square error of approximation (Steiger, 1990). SRMR = standardized root mean square residual (Jöreskog & Sörbom, 1996). GFI = goodness-of-fit index (Jöreskog & Sörbom, 1996). NNFI = non-normed fit index (Bentler & Bonett, 1980). CFI = comparative fit index (Bentler, 1990).

[a] Satorra-Bentler scaled χ^2 statistic (Sattora & Bentler, 1994), which adjusts the goodness-of-fit χ^2 value, standard errors of parameter estimates, and *p* values for distortion due to nonnormality in measured variables.

In light of less-than-optimal fit, confirmatory factor analysis was used in a post-hoc capacity for model refinement. Examination of parameter estimates suggested that items 6, 7, 12, and 17 were not contributing much to the variance explained across all 3 samples. Confirmatory factor analysis was re-run, using the remaining subset of 16 items to define a post-hoc model, once again including method factors. The results suggested an improved goodness of fit across the combined sample set, with RMSEA and SRMR values of .04 and GFI, NNFI and CFI reaching .90. Looking at fit indices for the individual samples, the model showed a slightly poorer fit in the Japanese sample, but was still an improvement in comparison to the entire 20-item model (see Table 7). Given the exploratory nature of this part of the current research, the fit of the 16-item, 3-factor (General Attitude plus Positive and Negative Method) model was judged as reasonable for use in constructing an initial Savoring Attitudes measure. However, it is recognized that further a priori testing and measure refinement is needed to validate this preliminary measure in subsequent studies.

Applying the results from the factor analysis, after appropriate rekeying, responses on the identified 16-item subset of AASS items were averaged to calculate a Savoring Attitudes score. Cronbach's alphas for the AASS scale were comparable across the samples, with .89 for the European North American respondents, .82 for the Asian North American respondents, and .83 for the Japanese respondents, suggesting adequate reliability. Item-scale reliability analysis did not identify any items as substantially detracting from scale consistency. As predicted, attitude score was positively correlated with the SBI Total score and all three SBI subscale scores in all three samples (see Table 8). There were no significant differences in the magnitudes of the correlations across the groups.

Table 8

Relations Between Beliefs About Savoring Capacity and Measures of Culturally Relevant Individual Differences

Measure	Group	n	SBI Score Total	Anticipating	Moment	Reminiscing
1. Attitudes About Savoring						
	Japanese	163	.715**	.631**	.452**	.687**
	Asian NA	262	.641**	.545**	.467**	.594**
	European NA	185	.702**	.598**	.530**	.651**
2. Beliefs About Change						
	Japanese	128	-.307**	-.271*	-.195*	-.296**
	Asian NA	203	-.236**	-.125*	-.229*	-.242**
	European NA	179	-.087	-.105	-.006	-.126*
2. Independent Self Construal (IISC)						
	Japanese	160	.145*	.126	.182*	.059
	Asian NA	261	.025	-.041	.122*	-.023
	European NA	181	.175*	.042	.305**	.083
3. Interdependent Self-Construal (IISC)						
	Japanese	160	.051	.066	-.004	.059
	Asian NA	261	-.036	-.019	-.058	-.013
	European NA	181	.122	.138	.067	.112
4. Identification with Own Culture						
	Japanese	160	.063	.081	.021	.052
	Asian NA	261	.196*	.197*	.077	.218**
	European NA		n/a	n/a	n/a	n/a
5. Identification with European NA Culture						
	Japanese	160	.013	-.018	.044	.008
	Asian NA	261	.186*	.094	.237**	.133*
	European NA	182	.180*	.103	.158*	.162*

Note. To account for the large number of correlations examined within each cultural sample, a Bonferroni correction was applied to the desired p-value (.05), resulting in a significance level that corrected for Type I error (p<0.0003).

[a] Sample size not large enough to allow for computation.

* p<.05, one-tailed unadjusted. ** p<.05, one-tailed Bonferroni adjusted (p<.0003)

Research Question 2: Are there cross-cultural differences in the efforts people make to prolong and enhance positive feelings?

I anticipated that East Asian respondents would report lower rates of savoring capacity than would European North Americans across all three temporal domains. Comparison of the latent means of the three temporal factors using the five-factor partially invariant measurement model provided support for differences in savoring capacity across the pooled comparison groups. Following established structural modeling procedures, by fixing one group's factor means at zero the other group's factor means can be scaled and tested for statistical significance relative to zero (see Byrne, 1998). These analyses revealed that the pooled sample of European North American respondents had a significantly higher mean than did Asian respondents on Anticipating ($z = 4.52, p < .001$), Savoring the Moment ($z = 4.77, p < .001$) and Reminiscing ($z = 4.68, p < .001$). There were no statistically significant differences in the variance of the factors by culture.

By using the observed means I was able to compare reported savoring capacity in the smaller, more strictly defined sample of European North Americans ($n = 187$) separately with that of Asian North Americans ($n = 262$) and Japanese ($n = 163$). Multivariate analysis of variance confirmed a main effect for culture on SBI Total score ($F(2, 605) = 44.04, p < .001$) and all three subscales. As predicted, European North Americans had a significantly higher mean SBI Total score than both Asian North Americans (5.47 vs. 4.97, Tukey HSD $p < .001$) and Japanese (5.47 vs. 4.69; Tukey HSD $p < .001$) (see Figure 2). There was a significant difference between SBI Total scores for Asian North Americans and Japanese (Tukey HSD $p < .001$). A similar pattern held across Savoring the Moment (5.32 vs. 4.76 vs. 4.40), Reminiscing (5.67 vs. 5.19 vs. 4.89), and Anticipating (5.40 vs. 4.96 vs. 4.78), however the difference between Japanese and Asian North Americans was not significant for the latter.
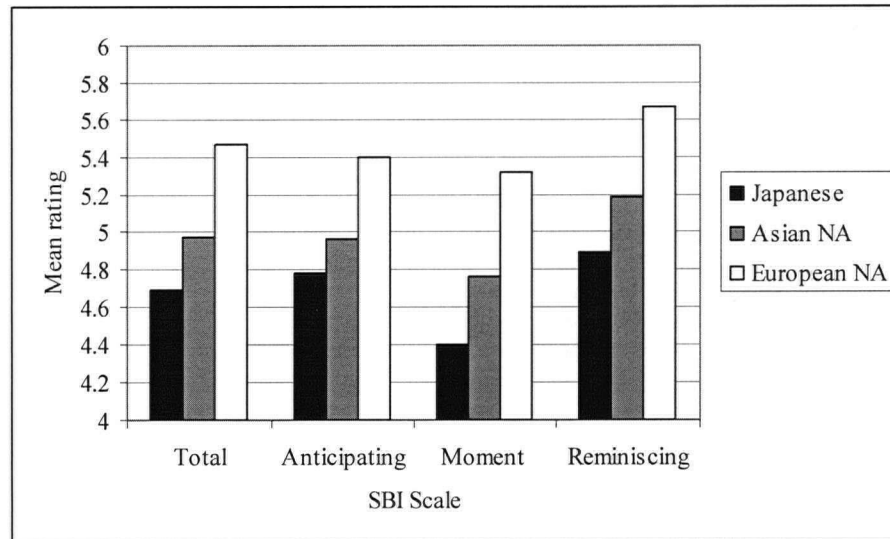
Figure 2. Mean differences in savoring capacity across cultures.

Post-hoc comparisons revealed significant differences between all three subscale scores for Asian North Americans (smallest $t(261) = 3.53, p < .001$), with ratings for capacity to savor through Reminiscing highest, followed by Anticipating and then Savoring the Moment. Japanese respondents reported significantly lower levels of capacity to Savor the Moment than to savor through Reminiscing ($t(162) = 6.60, p < .001$) or Anticipating ($t(162) = 4.94$, $p < .001$), but no significant difference in their scores for the latter two. European North Americans reported significantly higher levels of capacity for Reminiscing than either Savoring the Moment ($t(185) = 5.40, p < .001$) or Anticipating ($t(185) = 4.71, p < .001$), but there was no significant difference in scores for Savoring the Moment and Anticipating ($t(185) = .95, p = .34$).

Culturally relevant individual differences. Planned comparisons were conducted to examine whether differences in beliefs about change and self-construal hypothesized to underlie cultural differences in savoring manifested. As expected, European North Americans had a significantly lower mean beliefs in change score (44.71) than did both Japanese respondents (57.55; t (515) = 9.30, $p < .001$) and Asian North Americans (49.76;
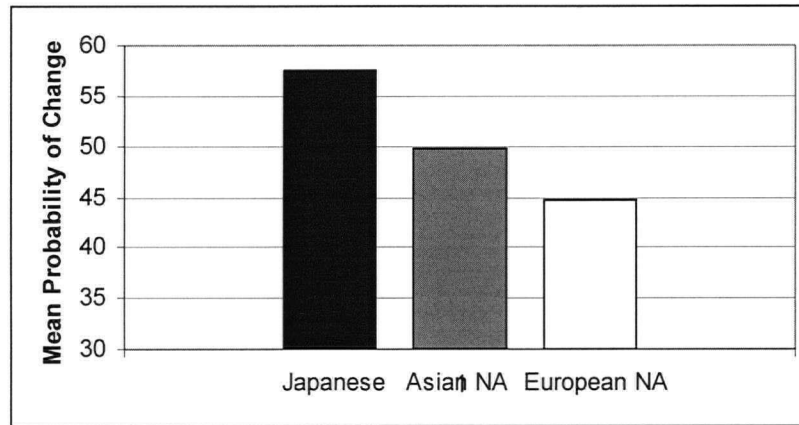
Figure 3. Cultural differences in beliefs about change as measured by mean probability for outcome reversal across three scenarios.

$t(515) = 4.11, p < .001$) (see Figure 3). The difference in scores for Japanese and Asian North Americans was also statistically significant, $t(515) = 5.77, p < .001$. As shown in Figure 4, European North Americans reported higher mean levels of Independence (3.60) than both Japanese (3.07; $t(607) = 11.22, p < .001$) and Asian North Americans (3.37; $t(607) = 5.23, p < .001$). Asian North Americans reported higher levels of Independence than did Japanese respondents, $t(607) = 7.06, p < .001$. However, expectations for Interdependence were only partially supported. As predicted, Asian North Americans reported higher mean levels of Interdependence (3.62) than did European North Americans (3.45; $t(607) = 3.74$, $p < .001$). Contrary to what was expected, Japanese respondents reported lower mean levels
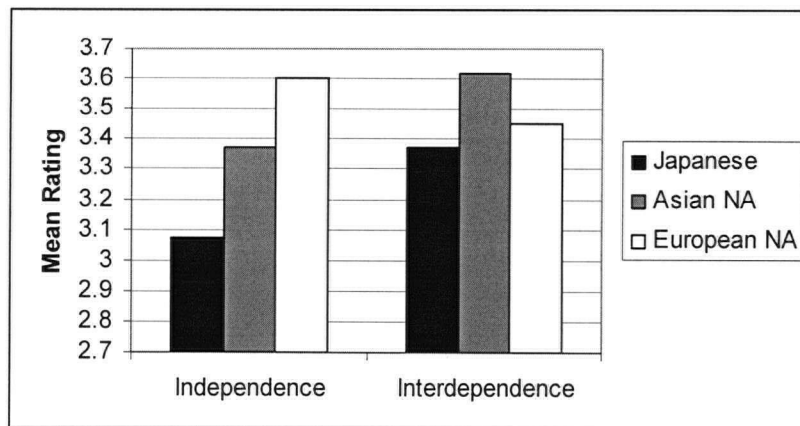

Figure 4. Cultural differences in independent and interdependent self-construal.

of Interdependence (3.37) than did either European North Americans, $t(607) = -2.12$, $p =$ .03), or Asian North Americans, $t(607) = -5.89$, $p < .001$.

Amongst Japanese and Asian North American participants, endorsement of greater beliefs in change was significantly negatively correlated with SBI Total score and scores on all subscales as predicted (see Table 8). Respondents who endorsed a higher probability of the reversal of outcomes in the change scenarios reported lower capacity to savor by anticipating, savoring the moment or reminiscing. Within European North American participants, change beliefs were correlated only with Reminiscing, again in a negative direction. With respect to self-construal, Japanese and European North American participants' scores on independent self-construal were positively correlated with SBI Total score and Savoring the Moment score. For Asian North Americans, independence correlated only with Savoring the Moment. For no group was there a significant correlation between interdependent self-construal and savoring capacity. With respect to cultural identification, Asian North Americans' and European North Americans' identification with European North American culture correlated positively with SBI Total score, Savoring the Moment, and Reminiscing. For Asian North Americans, identification with their nominated Asian culture also correlated positively with SBI Total Score, Anticipation, and Reminiscing, but not with scores on Savoring the Moment. There was no correlation between savoring scores and identification with either Japanese culture or European North American culture for Japanese participants.

A 2 X 3 analysis of variance revealed a significant main effect both for gender and culture on Attitudes About Savoring scores (gender $F(1, 604) = 31.68$, $p < .001$; culture $F(2, 604) = 33.28$, $p < .001$). The interaction was also significant ($F(2, 604) = 3.12$, $p = .04$) (see Figure 5). Overall, women rated savoring as more important and valuable than did men (4.75 vs. 4.46), however post-hoc examination of the confidence intervals did not support a gender
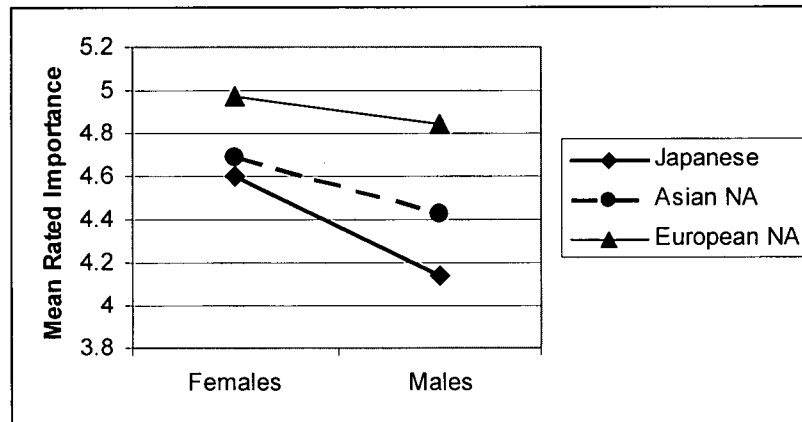
Figure 5. Attitudes about savoring importance by gender and culture.

difference in the European North American sample. Planned comparisons by cultural group

confirmed the predictions that European North Americans' average attitude scores (4.90)

were significantly higher than those of both Japanese (4.37; $t(607) = 7.62, p < .001$) and

Asian North Americans (4.56; $t(607) = 6.10$, $p < .001$), with the latter two cultural groups

differing as well, $t(607) = 2.34, p = .02$.

Mediation Analyses

Mediation analysis (Kenny, 2004; Kenny et al., 1998) was conducted to investigate

what role the hypothesized culturally relevant individual difference variables might play in

accounting for the relation between culture and savoring. As an initial step, a standard linear

regression analysis was run with culture group membership predicting savoring, as

operationalized by SBI Total score. Because culture group membership is a categorical

variable, this required utilizing two contrast variables, the first representing the difference

between the European North American group and the East Asian groups, and the second

representing the difference between the Asian North American group and the Japanese group.

The results established a significant relation, $F(2, 608) = 45.66$, $p < .001$, with 13% of the

variability in reported total savoring capacity accounted for by cultural group membership.

Both contrasts were significant predictors. Sobel tests were conducted separately with each

of these contrast variables to test the mediation effects of two of the originally hypothesized "unpacking" variables: attitudes about savoring importance and independent self-construal (Preacher & Leonardelli, 2004). Interdependent self-construal was not included as it was not significantly correlated with savoring for any group. Similarly, although beliefs about change correlated with savoring capacity for the overall sample, as noted above, this association did not hold for all cultural groups, only the East Asian samples, and so it too did not meet initial criteria as a potential general mediator. Both of the possible mediators tested were found to have a significant effect on SBI Total score controlling for culture group membership. The top half of Table 9 presents the results of these analyses. To further examine the relative influence of these mediators, a standard linear regression was computed with both of the variables entered as predictors along with culture group membership. When attitudes about savoring was included, independence no longer made a significant contribution to the prediction of savoring capacity. Controlling for attitude about savoring importance resulted in a decrease in the standardized coefficient from .35 to .15 for the contrast between Europeans North Americans and East Asians (see Figure 6), while the standardized coefficient for the contrast between Asian North Americans and Japanese dropped from .14
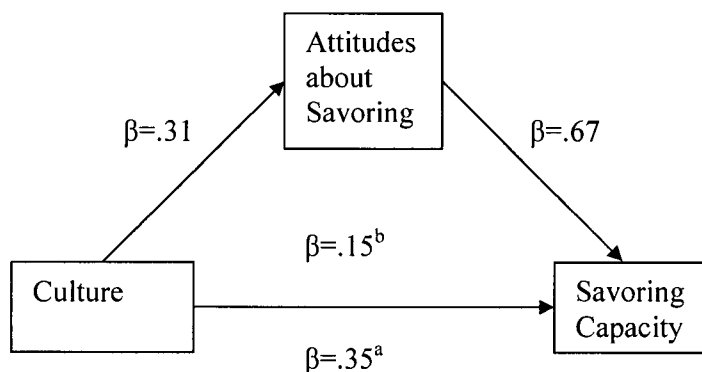

Figure 6. The mediation effect of savoring attitudes on the impact of culture (European North American vs. East Asian) on savoring capacity.
[a] Standardized regression coefficient for culture before mediation. [b] Standardized regression coefficient with savoring attitudes included as a mediator.

Table 9

Mediation Analysis of the Relation between Culture and Savoring

Predictor Variables	R^2	df	F	Unstandardized Coefficients		β	Sobel z
				B	Std. Error		
Culture	.13	2, 608	45.66**	.21[a]	.02	.35	
				.14[b]	.04	.14	
& Attitudes	.53	3, 606	346.25**	.09[a]	.02	.15	7.39**
				.08[b]	.03	.08	2.38*
& Independence	.14	3, 606	33.19**	-.19[a]	.03	-.32	2.37**
				-.11[b]	.04	-.11	2.31*
Culture, Attitudes, & Independence[c]	.53	4, 604	172.39**	.09[a]	.02	.15	
				.08[b]	.03	.08	
AASS				-.02	.05	.67	7.39**
Independence				-.02	.05	-.01	

Note. [a] Contrast between European North Americans and East Asians predicting SBI Total Score. [b] Contrast between Asian North Americans and Japanese predicting SBI Total Score. [c] Independence no longer significantly contributed to the prediction of SBI Total Score.
* $p < .02$ ** $p < .001$

to .08, illustrating partial mediation with both of these paths.

Given that the contrast between Asian North Americans and Japanese was a significant predictor of savoring capacity and that beliefs about change were significantly correlated with savoring capacity for both of these groups, I re-ran the mediation analysis including beliefs about change for these groups only. Although the difference between Asian North Americans and Japanese accounted for only 3% of the difference in savoring capacity alone, $F(1, 423) = 13.91$, p<.001, when attitudes about savoring and beliefs about change were included as predictors, this rose to 46%, $F(4, 330) = 71.41$, p<.001 . Again, independence was not a significant predictor, but beliefs about change made a small contribution beyond attitudes in these groups, with a β of -.08, p<.05. Figure 7 illustrates how savoring attitudes and change beliefs mediate the impact of the cultural difference between Asian North Americans and Japanese on savoring capacity.
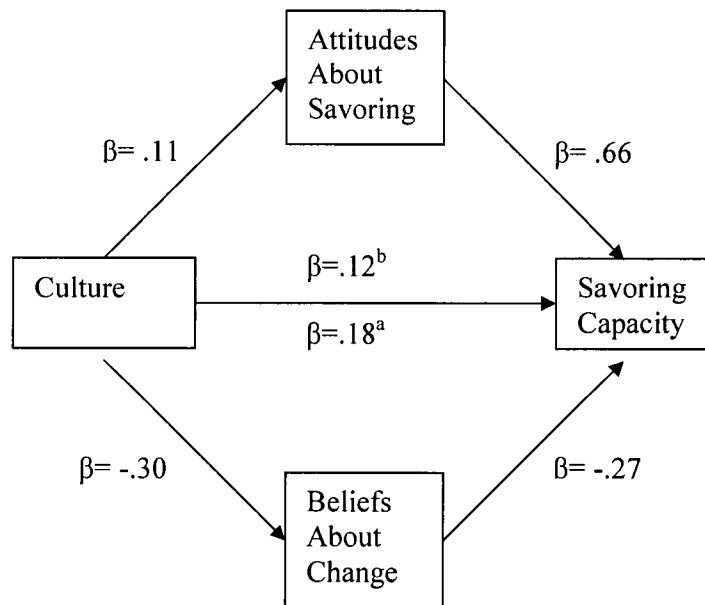

Figure 7. The mediation effects of savoring attitudes and change beliefs on the impact of culture (Asian North American vs. Japanese) on savoring capacity. [a] Standardized regression coefficient for culture before mediation. [b] Standardized regression coefficient with savoring attitudes and beliefs about change included as mediators.

Research Question 3: Are there differences between individuals from Eastern and Western cultures in terms of how they savor?

For the following analyses, the data from Japanese respondents who completed the questionnaire in English and those who completed it in Japanese were pooled after comparison of responses revealed only two significant differences in mean scores or variances for the WOSC Strategies for either vacation or grade administrations. Individuals who completed the WOSC in Japanese with regard to their most recent vacation had significantly lower scores on Sensory Perceptual Sharpening (2.49 vs. 3.52, $t(215) = 5.51$, $p < .001$) and significantly higher scores on Thanksgiving (5.43 vs. 4.70, $t(215) = 3.02$, $p = .003$) than those who received the measure in English. For the data from the Japanese language administration, open-ended responses were translated into English by a bilingually fluent research assistant. A random sample of these translations was verified for accuracy by a second bilingual assistant. The translated responses were then coded along with the English administration responses.

Self-Nominated Positive Events

Across the three cultural groups, 1,471 positive events were nominated. Two research assistants blind to the research hypotheses and respondents' culture group membership coded the positive events in terms of the focus (self or other) and the content category. The coding scheme included categories identified a priori from theory, such as interpersonal, achievement, and leisure, as well as post-hoc categories derived from preliminary review of the responses. This initial review also was done blind to culture group membership. Reliabilities for the coding categories ranged from .81 to .98. Instances of disagreement between the raters were resolved by discussion. The coding categories and percentage of events for each cultural group are presented in Table 10. Events could be coded in more than one content category. For example, an event such as going to a movie with friends

Table 10

Focus and Content of Positive Events Nominated by Japanese (N = 124), Asian North American (N = 226) and European North American (N = 181) Respondents.

	n	χ^2 (2)	p	Japanese	Asian NA	European NA
Focus						
Others	752	.99	.58	49	53	51
Self	690	1.28	.36	44	47	49
Content						
Interpersonal	692	18.10	.000**	49	52	40
Leisure	559	47.77	.000**	29^a	33^b	49^{ab}
Achievement	308	19.35	.000**	24^a	25^b	15^{ab}
Novelty	46	11.61	.003*	4	4	1
Distant Past (e.g. childhood)	65	26.88	.000**	9^a	5^b	1^{ab}
Future	34	31.51	.000**	6^a	4^b	$<.1^{ab}$
Action of Others	21	6.81	.033*	2	2	<.1
Religion	7	10.07	.007*	0	1	0
Natural Phenomenon	3	.22	.894	<.1	<.1	<.1
Total events	1471			326	605	540

Note. n refers to separate events nominated. Respondents could nominate more than one event, and events could be coded under more than one content category. Analyses using only the first strategy nominated by each subject produced similar results. Numbers within each category represent the proportion of positive events nominated within each cultural group.
[a,b] post-hoc comparison p<.05, one-tailed Bonferroni adjusted (p<.001)
*p<.05, two-tailed unadjusted; **p<.05, one-tailed Bonferroni adjusted (p<.001)

would be coded as both leisure and interpersonal.   In comparison to European North Americans, Asian North American and Japanese respondents were expected to nominate a higher proportion of events focusing on the role or involvement of others. This prediction was not supported. There were no differences between the groups in the proportion of events focusing on the self or others, with roughly half of the events falling in each category. However, as predicted, East Asian respondents nominated a higher proportion of events with interpersonal content than did European North Americans, with roughly 50% of events nominated classified as interpersonal for Japanese and Asian North Americans, compared to only 40% for European North Americans (χ^2 (2) = 18.10, p < .001). Following from Markus and Kitayama's (1994) findings that for Japanese respondents, positive affect was more strongly correlated with affiliation than with personal achievement, Japanese and Asian North American respondents were expected to nominate a greater proportion of interpersonal events than achievement events, and to nominate a lower proportion of achievement events than would European North Americans. Although all groups nominated a higher proportion of interpersonal events than achievement events, contrary to expectations, Japanese and Asian North Americans identified a significantly higher proportion of achievement events than did European North Americans (χ^2 (2) = 19.35, p < .001) (see Figure 8).
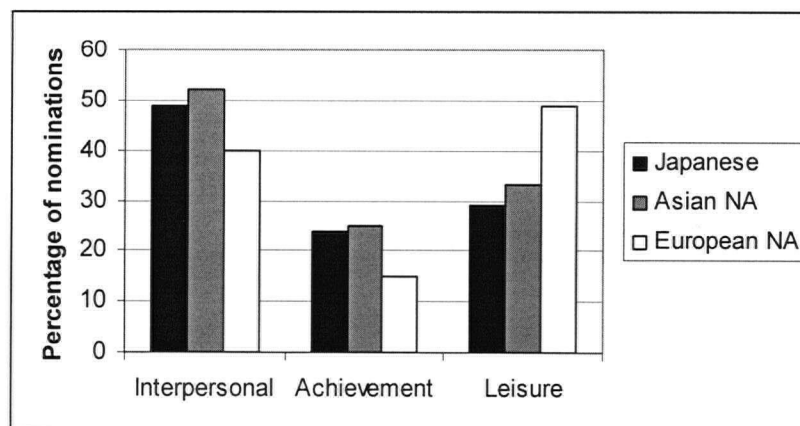

Figure 8. Content of nominated positive events.

Post-hoc comparisons, with alpha corrected, revealed three additional significant differences in the types of events nominated. In contrast to Japanese and Asian North Americans, European North Americans nominated a higher proportion of leisure events, with almost half of their events categorized as leisure, compared to roughly one-third for East Asian respondents (χ^2 (2) = 47.77, $p < .001$). In addition, there was a notable difference in temporal focus. Japanese and Asian North Americans reported a significantly higher proportion of positive events that occurred in the distant past than did European North Americans (χ^2 (2) = 26.88, $p < .001$), and also had a larger proportion of nominations that referenced a positive event yet to come (χ^2 (2) = 31.51, $p < .001$) (see Figure 9). In contrast, the content of events nominated by European North Americans referred primarily to recent past, ongoing, or recurrent events.
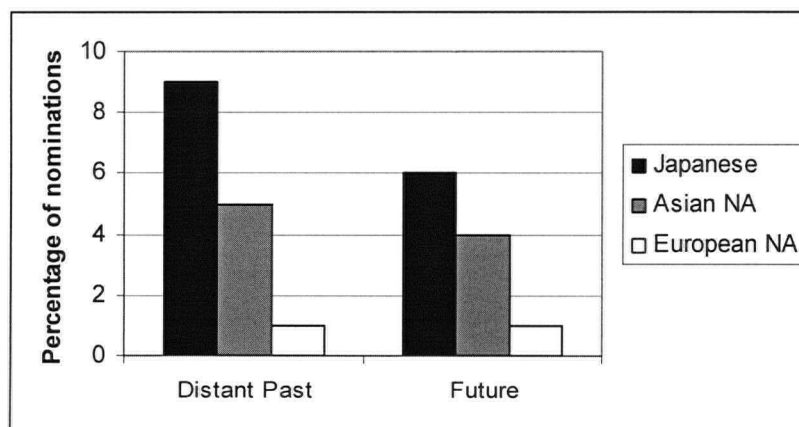

Figure 9. Percentage of nominations referencing distant past or future positive events.

Rated Event Characteristics

As part of the WOSC administration, respondents were asked to recall their most recent vacation or good grade and to rate this event on a number of characteristics, including the intensity and duration of enjoyment it produced. These mean ratings are presented by

cultural group in Table 11. A priori, East Asian respondents were predicted to exhibit lower

mean ratings of enjoyment intensity, shorter durations of enjoyment, and less anticipation

than European-North Americans. These predictions were generally not supported. In fact,

East Asian respondents reported significantly greater enjoyment intensity and duration than

did European North Americans, both for their most recent vacation and most recent good

grade (see Figure 10). There was no significant difference in the amount or duration of

enjoyment associated with the different events within each culture, with the exception that

European North Americans reported a longer duration of enjoyment with the vacation than

the good grade ($t(210) = 3.86$, $p < .001$). East Asian respondents did report lower levels of

anticipation of the vacation than did European North Americans, however Japanese

respondents actually endorsed greater anticipation of the good grade than did both Asian and

European North Americans. Both Asian and European North American respondents reported
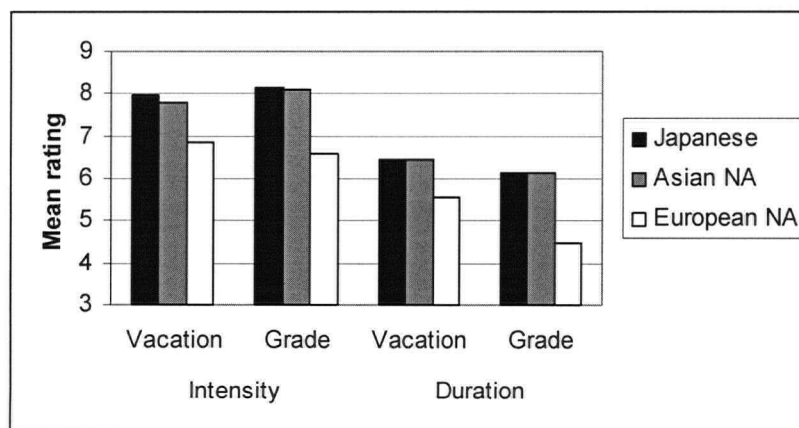
Figure 10. Intensity and duration of enjoyment reported for WOSC-rated positive events.

significantly higher levels of anticipation with vacation than good grade, in contrast to

Japanese respondents, who reported similar levels of anticipation across the two types of

events. European North Americans also rated the vacation as more desirable than did East

Asian respondents. Not surprisingly, given that the respondents were undergraduate students,

Table 11

Event Characteristics for Recalled Vacation and Grade for Japanese, Asian North American and European North American Respondents

	Event[a]	Japanese	Asian NA	European NA
Enjoyment Intensity	Vacation	7.97$_a$	7.79$_a$	6.83$_b$
	Grade	8.16$_a$	8.09$_a$	6.60$_b$
Duration of Enjoyment	Vacation	6.46$_a$	6.45$_a$	5.56$_b$*
	Grade	6.14$_a$	6.12$_a$	4.49$_b$
Desirability	Vacation	7.65$_a$	7.85$_a$	8.27$_b$
	Grade	7.65	8.12	8.15
Frequency	Vacation	4.20*	4.73*	4.42*
	Grade	6.24$_a$	6.09$_a$	7.04$_b$
Anticipation	Vacation	6.80$_a$	7.26$_a$*	8.28$_b$*
	Grade	7.37	5.76	5.52
Personal Responsibility	Vacation	6.93$_a$*	5.99$_b$*	5.69$_b$*
	Grade	8.03$_a$	8.49$_a$	9.11$_b$

Note. Judgments were made on 10-point scales (where 10 indicated greater amount of the characteristic in question). Means in the same row that do not share subscripts differ at p<.05, post-hoc comparison Dunnett C alpha correction.
[a] For vacation, Japanese (n=163), Asian North Americans (n=179), European North Americans (n=106). For grade, Japanese (n=94), Asian North Americans (n=139), European North Americans (n=101).
Within each characteristic, * denotes p<.05, post-hoc comparison of event type with Bonferroni correction (p<.002) across event, within culture group.

all groups rated good grade as occurring significantly more frequently than vacation, with European North Americans rating it as significantly more frequent than East Asian respondents. All groups identified a higher level of personal responsibility for the good grade than for the vacation. Between cultural groups, Japanese respondents reported greater personal responsibility for the vacation than Asian or European North Americans. European North Americans reported significantly higher levels of personal responsibility for the good grade than did East Asian respondents.

A subset of respondents was asked to rate the intensity and duration of enjoyment again after completing the WOSC. Completing the WOSC was associated with a significant increase in recalled intensity of enjoyment, $t(349) = -2.91, p < .004$, but no differences in recalled duration, $t(349) = 1.59, p = .11$. Post-hoc comparisons revealed a significant increase in recalled happiness for Japanese respondents only (7.97 vs. 8.37; $t(162) = -3.62$, $p < .001$).

Self-Nominated Savoring Strategies

Prior to completing the WOSC, respondents were asked to identify strategies they used for enhancing and prolonging positive feelings. Across the three groups, 1,012 strategies were identified. A similar procedure to that described above for the Self-Nominated Positive Events was followed in transcribing and coding the strategies. Once again, the coders were blind to the research hypotheses and respondents' culture group membership. Strategies were coded as to their general focus on the self or other, their temporal orientation, and content. The content codes included the 10 WOSC strategies, which primarily comprised strategies for savoring in the moment, as well as post-hoc categories derived from a preliminary review of the responses. Again, this initial review was done blind to culture group membership. Strategies could receive more than one content code. Reliabilities for the coding categories ranged from .85 to .96. Instances of disagreement between the raters were resolved by

discussion. The coding categories and their representation in the nominations of each cultural group are presented in Table 12. East Asian respondents were predicted to demonstrate a greater focus on others in their nominated strategies. Parallel to predictions for the WOSC ratings, European North American respondents were expected to nominate more Self-Congratulation, Behavioral Expression, and Sensory Perceptual Sharpening than East Asian respondents, who were expected to nominate more Comparing and Kill-Joy Thinking. These predictions were only partially supported. Contrary to what was expected, the strategies nominated by Japanese respondents focused more on the self (83%) than those identified by Asian (71%) or European North Americans (69%; χ^2 (2) = 13.58, p = .001). The majority of the strategies nominated (65%) were classified as occurring at the time of the positive event, with 28% occurring after the event, and 5% in anticipation. Japanese respondents nominated a greater proportion of Anticipation strategies (13%) than either Asian or European North Americans (3% each).

The WOSC strategies captured the majority of nominations in all cultural groups, accounting for 71% of the strategies nominated by European North Americans, 58% of the strategies nominated by Asian North Americans, and 55% of those nominated by Japanese respondents. The vast majority of these nominations fell under Sharing or Memory Building, which each accounted for approximately 20% of the nominations across groups. The remaining strategies each accounted for a relatively low proportion of nominations, with only Absorption reaching more than 5%, and only 1 nomination (<.001%) coded as Kill-Joy Thinking. As expected, European North Americans reported more Behavioral Expression (8%), Sensory Perceptual Sharpening (5%), and Self-Congratulation (3%) than East Asian respondents (3%, 1% and 1%, respectively). The difference in Comparing and Kill-Joy Thinking was non-significant.

Table 12

Focus, Content, and Temporal Orientation of Savoring Strategies Nominated by Japanese (N=124), Asian North American (N=226) and European North American (N=181) Respondents

	n	χ^2 (2)	p	Japanese	Asian NA	European NA
Focus						
Others	273			17	29	31
Self	728	13.58	.00*	83	71	69
Content						
Sharing	186	9.16	.01*	11	20	21
Memory Building	215	.39	.83	20	21	22
Self-Congratulation	15	7.00	.03*	1	1	3
Temporal Awareness	13	3.30	.19	3	1	1
Behavioral Expression	46	17.72	.00**	2	3	8
Comparing	19	4.65	.10	4	2	1
Sensory Perceptual Sharpening	28	14.97	.00**	1	1	5
Absorption	70	3.02	.22	6	6	9
Thanksgiving	27	9.43	.00*	6	3	1
Kill-Joy Thinking	1	4.06	.13	1	0	0
Focus on Positive	40	4.29	.12	7	3	3
Minimize Negative	38	2.12	.35	2	4	4
Lower Expectations	6	1.90	.39	1	<1	1
Replicate Event	30	20.80	.00**	5	5	0
Extend Duration	43	5.38	.07	6	5	2
Increase Activity	31	9.41	.01*	3	5	1
Increase Happiness of Others	17	1.39	.50	1	2	1
Continue Connection	27	16.11	.00**	4	4	<1
Make Greater Efforts	33	16.92	.00**	5	4	<1
Increase Knowledge	21	14.75	.00*	3	4	0
Anticipation	50	30.57	.00**	13	3	3

Table 12 (continued)

	n	χ^2 (2)	p	Japanese	Asian NA	European NA
Reminiscing	266			36	27	22
Alone	116	4.13	.13	16	11	10
With Others	60	1.10	.58	5	6	7
With Objects	90	15.25	.00**	15	10	5
Temporal Orientation						
Before	54			7	5	5
During	660			58	64	72
After	287			35	31	23
Total strategies	1012			200	405	407

Note. n refers to separate strategies nominated. Respondents could nominate more than one strategy. Analyses using only the first strategy nominated by each subject produced similar results.

[a,b] post-hoc comparison p<.05, one-tailed Bonferroni adjusted (p<.001)

* p<.05, two-tailed unadjusted; **p<.05, one-tailed Bonferroni adjusted (p<.001)

Post-hoc comparisons revealed several significant differences in identified

non-WOSC strategies. Several strategies nominated by East Asian respondents were

not represented in the European North American responses, including Replication of

the Event, Continuing Connection with Others Involved, Making Greater Efforts, and

Increasing Knowledge. In all but the latter case, the differences in proportion of

nominations for these categories were statistically significant with alpha correction.

Cultural Differences in WOSC Strategies

Given that the WOSC contains 60 items comprising 10 strategy subscales, establishing the

measurement equivalence of the WOSC across cultural groups was beyond the scope of the

current study. However, within each cultural sample, Cronbach's alphas were computed for

the 10 strategy subscales using the WOSC responses for vacation and the results are

presented in Table 13. In general, subscale reliability was similar to that reported by Bryant

(2003), with 6 of the 10 strategies showing approximately equal or greater reliability across

all three cultural groups. Within the Japanese sample, reliability for the subscale of Memory

Building was slightly lower than that reported by Bryant (.68 vs. .77) and item analysis

suggested that Item #20 (I consciously reflected on the situation -- took in details, tried to

remember them, made comparisons) was detracting from the subscale reliability. Without

this item, Cronbach's alpha was .73. Similarly, the reliabilities for Temporal Awareness and

Absorption were somewhat lower across all samples in comparison to Bryant (2003), with the

greatest magnitude of decrease in the Japanese sample. Item analysis did not identify any

specific items exerting a detrimental influence in these cases. Of note, the reliability for

Thanksgiving was somewhat greater than that reported by Bryant for all cultural groups.

Item analysis suggested that the removal of Item 59 would result in greater reliability in both

the Japanese and Asian North American samples (.72 to .80). However, this would leave

only 2 constituent items for this strategy subscale. In comparison to Bryant's previous

Table 13

Ways of Savoring Checklist Subscale Reliability for Japanese (n=217), Asian North American (n=241) and European North American (n=109) Samples

	Japanese	Asian NA	European NA	Bryant (2003)
Sharing	.79	.82	.87	.82
Memory Building	.68	.76	.77	.77
Self-Congratulation	.75	.76	.84	.77
Temporal Awareness	.62	.76	.79	.84
Behavioral Expression	.78	.80	.81	.78
Comparing	.74	.70	.70	.70
Sensory Perceptual Sharpening	.66	.66	.48	.65
Absorption	.53	.58	.61	.67
Thanksgiving	.70	.65	.68	.57
Kill-Joy Thinking	.73	.80	.80	.80

American samples, the current European North American sample responses demonstrated slightly higher reliability for Self-Congratulation and lower reliability for Sensory Perceptual Sharpening.

Planned comparisons were conducted to test several predictions drawn from the literature. As with the self-nominated strategies, European North Americans were expected to endorse greater levels of Self-Congratulation, Behavioral Expression, and Sensory Perceptual Sharpening than East Asian respondents, who were expected to endorse greater levels of Comparing and Kill-Joy Thinking. Data from 172 Japanese, 179 Asian North American and 629 General Americans were available on savoring behavior with respect to a recent vacation. The results for the subsample of 105 European North Americans were similar to those for the larger General American sample, so only the latter are reported here. As predicted, Americans endorsed higher levels of Self-Congratulation (4.25 vs. 3.88, $t(976) = 4.36, p < .001$), Behavioral Expression (4.22 vs. 3.77, $t(974) = 5.39, p <.001$) and Sensory Perceptual Sharpening (3.68 vs. 3.24, $t(974) = 5.46, p < .001$) than East Asian respondents (see Figure 11). As predicted, East Asian respondents endorsed significantly
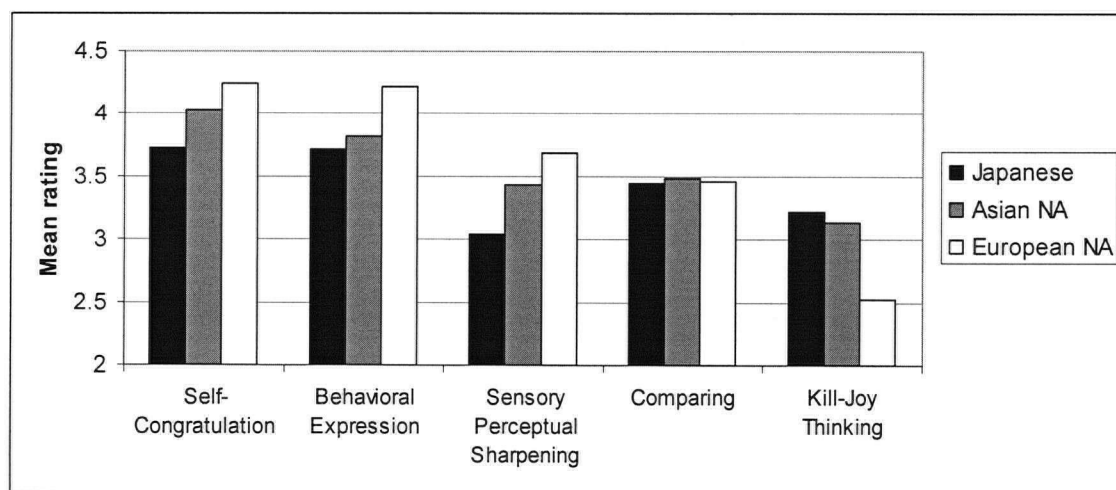

Figure 11.   Rates of endorsement of WOSC savoring strategies for recent vacation.

higher levels of Kill-Joy Thinking (3.17 vs. 2.52, $t(976) = 8.89$, $p < .001$). Contrary to what was predicted, there were no significant differences in Comparing ($t(974) = .12$, $p = .91$).

A smaller sample of respondents completed the WOSC with respect to a recent good grade. Data for these analyses were available from 82 Japanese, 139 Asian North Americans and 114 European North Americans. Both Asian and European North Americans endorsed higher levels of Self-Congratulation than Japanese respondents (4.56, 4.46 vs. 3.54, smallest $t(193) = 5.33$, $p < .001$). Similarly, the difference in Sensory Perceptual Sharpening ($t(332) = -.30$, $p = .77$) was not reliable. Post-hoc comparisons indicated that Asian North Americans endorsed significantly more of this strategy than Japanese. Contrary to what was predicted, East Asian respondents endorsed higher levels of Behavioral Expression (2.59 vs. 3.08, $t(332) = -3.26$, $p = .001$) than European North Americans, but post-hoc comparison suggested that this was due to significantly higher levels in the Asian North American sample. As predicted, East Asian respondents endorsed higher levels of Comparing (3.23 vs. 2.93, $t(332) = 2.26$, $p = .02$) and Kill-Joy Thinking (2.98 vs. 2.64, $t(332) = 2.86$, $p = .005$). Once again, this appeared to reflect higher endorsement in Asian North Americans specifically.

A complete listing of the means of each strategy for both vacation and grade is presented in Table 14. Additional post-hoc comparisons revealed significant differences in endorsement of Sharing, Memory-Building, and Absorption for vacation ratings. In all cases, Japanese respondents endorsed significantly lower levels than Asian North Americans, who in turn endorsed significantly lower levels than European North Americans. A less consistent pattern emerged in post-hoc analyses of grade ratings. Both Japanese and Asian North Americans reported significantly more Memory Building and Temporal Awareness than European North Americans. However, Asian North Americans reported more Sharing and Comparing than either Japanese or European North Americans. They were similar to European North Americans in their reported levels of Self-Congratulation, Sensory-

Table 14

Mean Endorsement of WOSC Savoring Strategies for Japanese, Asian North American, and Western North American[a] Respondents

	Event[b]	Japanese	Asian NA	Western NA
Sharing	Vacation	4.34_a	4.75_b	5.30_c
	Grade	3.30_a	4.04_b	3.45_a
Memory Building	Vacation	4.18_a	4.50_b	4.89_c
	Grade	2.85_a	2.92_a	2.28_b
Self-Congratulation	Vacation	3.73_a	4.03_b	4.25_b
	Grade	3.54_a	4.56_b	4.46_b
Temporal Awareness	Vacation	4.16	4.30	4.28
	Grade	3.16_a	3.27_a	2.72_b
Behavioral Expression	Vacation	3.71_a	3.82_a	4.22_b
	Grade	$2.94_{a,b}$	3.16_a	2.57_b
Comparing	Vacation	3.45	3.48	3.46
	Grade	2.85_a	3.46_b	2.91_a
Sensory Perceptual	Vacation	3.04_a	3.43_b	3.68_c
Sharpening	Grade	2.23_a	2.77_b	$2.56_{a,b}$
Absorption	Vacation	3.73_a	4.36_b	4.61_c
	Grade	2.79_a	3.53_b	$3.22_{a,b}$
Thanksgiving	Vacation	4.87	4.56	4.88
	Grade	$3.94_{a,b}$	4.28_a	3.79_b
Kill-Joy Thinking	Vacation	3.21_a	3.14_a	2.52_b
	Grade	$2.89_{a,b}$	3.04_a	2.64_b

Note. Ratings were made on 7-point scales (with higher numbers indicating greater endorsement). Means in the same row that do not share subscripts differ at $p < .05$, post-hoc comparison Dunnett C alpha correction.
[a] This group comprises a General American sample for vacation and a European North American sample for grade. [b] For vacation, Japanese (n =172), Asian North Americans (n =179), General Americans (n =629). For grade, Japanese (n =82), Asian North Americans (n =139), European North Americans (n =114).

Perceptual Sharpening, and Absorption, endorsing significantly greater levels of these

strategies than did Japanese respondents.

Reminiscing

In addition to endorsing savoring strategies presented within the WOSC, one sample

of Japanese and Asian North American respondents (total $n = 96$) provided information

regarding aspects of their reminiscing behavior. Prior to this, with an American sample

($n = 200$), Bryant found that 36% of respondents reported reminiscing when they were sad,

compared to 10% who reported reminiscing when they were feeling good. In the current

sample, participants rated the extent to which they reminisced when in various states on a

10-point scale, where 10 denoted *"a great deal"* and 1 denoted *"not at all."* Ratings of 1 to

3 were coded as endorsement of minimal levels of the response in question, ratings of 4 to 6

as moderate levels and ratings of 7 to 10 as substantial levels. Although these data are

unfortunately not directly comparable in format to Bryant's study, they do allow preliminary

examination of whether the same motivations are endorsed by East Asian respondents.

Summing across these categories, 80% of the respondents in the East Asian sample endorsed

reminiscing when sad at moderate or substantial levels. Reminiscing when feeling good had

similar ratings, with 83% of respondents endorsing moderate to substantial levels. Notably,

more respondents endorsed reminiscing when feeling good than when feeling sad at a

substantial level (53% vs. 39%), suggesting perhaps a slightly different application than that

reported by the Western sample. In terms of identified motives, Bryant reported 29% of his

American sample identified reminiscing to help handle problems, and 18% reported using it

as a means of escape. In the present East Asian sample, 23% of respondents endorsed

reminiscing as a strategy for handling problems at a substantial level, and an additional 44%

at a moderate level. In contrast, 50% of respondents endorsed reminiscing to escape from the

present at a substantial level, with a further 34% endorsing it at a moderate level. Finally,

reminiscing was identified as a strategy for feeling good by 19% of the Western sample. East Asian respondents also endorsed this motivation, with 65% rating it at a substantial level, and a further 28% at a moderate level.

Summary of Main Findings

Scores on the Savoring Belief Inventory showed equivalence of factor structure and partial equivalence of factor loadings across East Asian and European North American respondents. Similar relations were supported between savoring and most measures of individual differences and subjective adjustment across the groups, suggesting that the construct of savoring as developed with research in Western populations adequately generalizes to East Asian samples.

Expected differences in savoring capacity manifested, with East Asian respondents endorsing significantly lower capacity to savor by anticipating, savoring the moment, and reminiscing. However, expected differences in the factors hypothesized to underlie this difference were only partially supported. Although both Japanese and Asian North American respondents endorsed greater beliefs in change and lower levels of independence than European North Americans, Japanese respondents did not endorse higher levels of interdependence as expected. Consistent with expectations from previous research, East Asians in the current study placed less value on the enhancement of positive feelings. This emerged as the primary variable underlying the cultural difference in savoring capacity, although beliefs about change also mediated the relation between culture and savoring when comparing Asian North Americans and Japanese.

In self-nominations of positive events, East Asians identified a higher proportion of interpersonal and achievement events, and a lower proportion of leisure events, than European North Americans. In addition, they demonstrated a broader temporal range, nominating positive events from the distant past and anticipated future, in addition to the

present and recent past. The majority of East Asian self-nominated savoring strategies fell

within categories covered by the present-oriented WOSC, in particular Sharing and Memory-

Building. However, a number of novel strategies were identified that occurred relatively

infrequently in the European North American nominations. These included Making Greater

Efforts, Increasing Activity, Increasing Knowledge, and Continuing Connection with others

involved in the experience.

      The WOSC strategy subscales showed comparable reliability across the groups.

Ratings for most recent vacation generally supported the predicted cultural differences in

strategy use, with East Asians endorsing lower levels of Self-Congratulation, Behavioral

Expression, and Sensory Perceptual Sharpening, and higher levels of Kill-Joy Thinking than

European North Americans. There were no significant differences in levels of Comparing,

Temporal Awareness, or Thanksgiving across the groups. However, these cultural

differences were less reliable in ratings for most recent good grade, with Asian North

Americans, and to a lesser extent Japanese, showing higher levels of Self-Congratulation,

Behavioral Expression, and Sensory Perceptual Sharpening than expected. Finally, the

motivations and practices with respect to reminiscing identified in Western samples appeared

equally relevant to East Asian respondents, who endorsed reminiscing both when feeling

good and when feeling sad, as a strategy to enhance positive feelings as well as to escape

negative feelings.

Discussion

Examining Savoring In Different Cultures

The construct of savoring has only recently received attention as a process model of positive affect, and is still at the stage of both model and measurement development. Given its infancy, it presents a rare opportunity to investigate issues of universality and cultural variation at a stage where theory-driven cultural considerations can inform the basic conceptual framework of the construct as it is being established. The present study marked the first examination of savoring behavior in Japanese and Asian North American respondents. As others have noted, investigations of cultural differences must grapple with the issue of whether measures developed within certain cultural groups can be validly utilized with other groups before comparisons of scores can be interpreted (Diener et al., 2003; van de Vijver & Tanzer, 1997). Tests of measurement invariance are a means of answering this concern (Steenkamp & Baumgartner, 1998; Vandenberg & Lance, 2000), as are comparisons of factor structure and scale reliability (Diener et al., 2003). All of these methods were utilized in the current study, and suggested that the Savoring Belief Inventory developed by Bryant (2003) can be validly employed to study beliefs about savoring capacity in both Western and Eastern cultures. As in Bryant's validation studies, for both cultural groups in the current study, responses on the measure supported a five-factor model, with two method factors in addition to the theoretically based factors representing savoring across three temporal orientations. East Asian respondents' ratings of capacity to savor in general and across these temporal orientations evidenced considerable similarity to European North Americans in terms of their relations to individual difference variables and measures of subjective adjustment, providing further support for the generalizability of the construct across cultures.

However, the results of the current study, like those from other investigations of cultural differences in emotional processes, also suggest that the process of savoring may demonstrate considerable variability, depending on the cultural context in which it is examined. Before

discussing the implications of these findings, it is important to acknowledge some of the challenges and limitations present when cross-cultural research is heavily reliant on self-report measures, as in the case of the current study, and address the potential impact of these factors with respect to the reported findings.

Methodological Limitations (and Strengths)

Most of the current research was conducted with English language materials. Reduced English fluency on the part of some of the East Asian participants may have introduced more error variance into the data. At the same time, it is reasonable to postulate that non-Western individuals more fluent in English have probably had more exposure to Western ideas and values. Moreover, other researchers have identified that individuals who speak more than one language respond differently when sampled in their native language than in their secondary language (Ross, Xun, & Wilson, 2002). In the current study, these factors may have exerted a minimizing influence in terms of cultural differences, leading to the appearance of greater cultural universality than is actually the case. In light of this concern, the study materials were translated into Japanese for administration to one sample, and the responses compared to those of the English language samples, with few differences found. However, translation itself presents a number of difficulties, not the least of which is ensuring equivalent meaning of the underlying concepts of interest and the questions being used to operationalize them. Even employing fluently bilingual translators and engaging in the process of backtranslation and consensual resolution of discrepancies, as was done in this study, one cannot be certain that the concepts of interest are being represented with equivalent meaning. It is somewhat of a catch-22 position to try to ensure that a psychological construct is represented in a culturally appropriate way, when the manifestation of that construct in the specific cultural context is the very thing under investigation, as the construct itself is under development. Moreover, translation introduces a new set of concerns, as the reliability and validity of the measures being

used have generally been established with English language versions, and may not extend to the translated versions.

In addition to issues of translation and comprehension, other researchers have identified challenges in interpreting cross-cultural data derived from questionnaire measures. Self-report measures with Likert-type rating scales, as were used to operationalize several of the variables of interest in this study, although prevalent, have been criticized for problems with reference-group effects and response biases (Heine, Lehman, Peng & Greenholtz, 2002; Heine, under contract). To the extent that respondents from different cultures are using different standards to measure their own behavior, one must be cautious in interpreting mean differences across cultural groups. In addition, other research has found East Asians to exhibit a moderacy bias in their responses to Likert-type scales in comparison to European North Americans, and to be more modest in their endorsement of items that could be seen as self-enhancing. Dialectic influences have also been associated with a greater tendency for acquiescence (Chen, Lee, & Stevenson, 1995; Heine, under contract; Heine et al., 1999). Reference-group effects can be mitigated to a degree by making item content more concrete, or by designing response choices to decrease subjectivity. Although the use of already established measures precluded the tailoring of item content to a large degree in the current study, where possible, respondents were asked to evaluate concrete thoughts or behaviors, and the response set was varied to reduce the influence of such response style biases and confounding effects. Nonetheless, these factors are important to keep in mind when interpreting the significance of the pattern of findings across cultures, in particular when they correspond with expectations derived from theory. However, in the face of such concerns, it is encouraging to note that East Asian respondents did not present with lower or more moderate scores than European North Americans across all self-report measures. Also, these confounding factors are less problematic with respect to identifying relations between variables of interest within each cultural group. Finally, to the extent

that the findings from self-report measures converge with data from other methods, in this case coded responses to open-format questions, we can have more confidence in their validity.

Unexpected Findings Regarding Self-Construal

One of the primary objectives of the current study was to examine whether there was support for predicted East-West differences in efforts to enhance positive feelings. The data suggested that as expected, East Asian individuals endorsed lower rates of savoring than European North Americans, and this held for Anticipating, Savoring the Moment and Reminiscing. Culture was a significant predictor of general savoring capacity, and as expected, the influence of cultural norms in terms of attitudes about the importance of savoring and beliefs about change appeared to be partially responsible for the observed cultural variation. An unexpected finding was that self-construal did not appear to be contributing in this regard. Correlations between savoring and independence were weak, while those with interdependence were nonsignificant. Although mean independence scores showed the predicted pattern across groups, Japanese respondents had significantly lower mean interdependence ratings than either European or Asian North Americans. In their meta analyses of findings regarding cultural differences in individualism – collectivism, Oyserman, Coon and Kemmelmeier (2002) endorsed an orthogonal view of these constructs, and concluded that research supported greater collectivism (and less individualism) in Chinese in comparison to European Americans, but no such distinction with Japanese; the findings regarding interdependence in the current study may therefore be in line with other research. However, given that self-construal was operationalized with a Likert-type self-report rating scale (Singelis, 1994), it is also possible that this reflects the influence of reference-group. Given that the Japanese respondents in the current sample were undergraduate students who had left their friends and family to come to a North American university on a school exchange program, if they were rating themselves in comparison to their peers back home, they may have judged themselves less interdependent, although in comparison to European North American undergraduates their objective levels of interdependence may have been

higher. Findings from other research utilizing the Singelis (1994) scale have shown inconsistent replication of the expected East-West differences in independence and interdependence, possibly because of such confounds (Oyserman et al., 2002). Although cross-cultural researchers sometimes rely on culture group membership to operationalize independence or interdependence of self-construal, this obscures individual variation in self-construal within culture groups and can blur the distinction between self-construal and other culturally-relevant variables, both of which are undesirable if "unpacking" the cultural variation is an objective, as in this study. To have greater confidence in the findings with respect to the role of self-construal, it would be useful to utilize methods that overcome some of the limitations mentioned above in further studies (see Heine, under contract). As an example, Schimmack, Oishi and Diener (2002) were able to disentangle the influence of individualism/collectivism from Asian Dialecticism when examining the relation between pleasant and unpleasant emotions, by including culture groups that were discordant for the two variables of interest (i.e., non-Asian collectivistic) for comparison. Using priming to situationally cue individualist or collectivist values or independent-interdependent self-construals allows for experimental manipulation of culture variables (Hong, Morris, Chiu & Benet-Martínez, 2000), although it has been criticized for introducing ambiguity in terms of the operationalization of these constructs (Oyserman et al., 2002).

A further limitation of the current study with respect to examining culturally-related differences in self-construal relates to the reliance on undergraduate participants residing within North America for the East Asian samples. Oyserman et al. (2002) noted that, particularly with respect to comparisons of individualism between Japanese and Americans, larger effect sizes have been reported for non-student samples. Undergraduate samples may provide a conservative estimate of cultural differences in this dimension. Furthermore, other researchers have noted the complicating role that multiple cultural influences can introduce when examining cultural differences in cognitive or emotional processes (Hong et al., 2000). Both the Japanese and Asian

North American respondents were surveyed within a Western North American situational context. Although the Japanese respondents were residing in North America only temporarily and reported higher mean levels of identification with Japanese culture than European North American culture (mean difference 1.83, $t(162) = 11.04$, $p < .001$), they still endorsed moderate levels of identification with European North American culture (5.72 out of 10) overall. Asian North American respondents showed a similar pattern (mean difference .38, $t(261) = 2.98$, $p < .01$), not surprisingly endorsing greater identification with European North American culture (7.52) than did Japanese respondents. Data from the sample of Japanese respondents who completed the measures in Japanese were for the most part similar to that from the English language administrations, however, the inclusion of a sample of East Asian respondents surveyed within an East Asian situational context with less salient Western cultural influences would likely allow for a better examination of the impact of the culture variables, whose effect may well have been diluted or counteracted within the current setting.

Dialecticism / Change Beliefs

Attitudes about the importance of enhancing positive feelings emerged as the primary variable underlying the cultural difference in savoring capacity. As expected, people's affective mediation appears tied to their beliefs, such that those who rate savoring as less important also rate themselves as having less capacity to do it. Consistent with previous research, East Asians in the current study placed less value on the enhancement of positive feelings. Asian dialecticism and associated greater beliefs in change and outcome reversal was hypothesized as one factor that might be contributing to this attitudinal difference, and the results suggest it plays some role in predicting savoring differences. However, the associated mediation effect was small in the current study, and limited to the difference between Asian North Americans and Japanese respondents.

Consistent with findings reported by Bryant (2003), across all groups, recent happiness level had the greatest association with savoring in the moment. At a general level, this would seem to argue against the hypothesis that Asian dialecticism and beliefs about change exert a minimizing

effect on positive feelings at the time that they occur and dampen efforts at enhancement (Bagozzi et al., 1999). However, beliefs about change were negatively correlated with savoring in general, and with each of the three temporal orientations, for both Japanese and Asian North Americans. As predicted, individuals in these groups who endorsed a higher probability of outcomes reversing rated themselves as having lower capacity to savor. In contrast, although the mean levels of change beliefs evidenced across the culture groups were consistent with the findings of Ji et al. (2001), such that European North Americans endorsed a lower probability of reversal of outcomes, there was only a slight relation between beliefs about change and reminiscing in European North Americans, and no relation with anticipating or savoring in the moment. One possibility is that for East Asian respondents, the salience of change, as evidenced by higher estimates of outcome reversal, is a reflection of greater awareness of cultural norms in general, which would also include awareness of norms prescribing restraint with respect to positive feelings. Consistent with this, probability of change was significantly negatively associated with ratings of the importance of enhancing positive feelings in Asian respondents. Another possibility is that the lack of association of change beliefs with savoring in European North Americans reflects the tendency for Westerners to emphasize their own causal role over situational factors in determining their behavior, including mediation of affect. Even European North Americans for whom change was more salient as an outcome in the scenarios may therefore have seen little relation between the likelihood of constancy or variation in the situation and their own self-directed efforts to promote happiness. Suh et al. (1998) suggested a similar process might underlie cultural differences in the degree to which internal attributes influenced life satisfaction judgments across cultures, noting the tendency to listen to oneself for answers in individualist nations. In contrast, East Asian respondents may be more likely to attribute their affect enhancing behavior to situational factors, such as constancy or variation, rather than factors originating within the individual (Choi, Nisbett, & Norenzayan, 1999). Further studies developing the method of measuring change beliefs and dialecticism influences would be useful for

investigating the influence of this variable more fully. Similarly, further development and validation of the Attitudes About Savoring Importance measure would be helpful for teasing out the specific ways that cultural norms impact on affective beliefs. For example, Matsumoto et al. (1988) reported that Japanese attributions for emotions, including joy, fear and shame, made greater reference to chance or fate than Americans, who tended to focus on the causal role of others. Others have identified culturally related restrictions or conversely less exclusivity that may influence the definition and categorization of emotions in East Asian cultures (Mesquita and Karasawa, 2002; Nisbett, Peng, Choi, & Norenzayan, 2001). Although cultural context exerts a pervasive influence on beliefs and behavior, the specific dynamics of this influence can be paradoxically difficult to identify. In the current study, a measure of savoring attitudes in general was constructed, with items following closely to the Savoring Beliefs Inventory, but focusing on how important or useful general savoring efforts were seen to be, rather than the rater's perception of his or her ability to engage in savoring. Although separating ratings of beliefs from ability is a useful first step, further developing the specificity of belief differences, for example if certain savoring strategies are more acceptable than others or if savoring is seen as more valid in certain situations, would likely reduce the overlap between savoring attitudes and capacity, and provide a better picture of the impact of cultural influences. Although the current results add to the body of findings suggesting differences in the ways that emotions are viewed across cultures, the factors responsible for producing these differences remain in need of further examination.

Happiness: A Goal in Itself or a Reflection of the Achievement of Other Goals?

European North American's nominations of positive events emphasized the value placed on the pursuit of happiness as a motive itself, with significantly more of their nominations referencing events undertaken purely for leisure enjoyment. East Asians were expected to nominate fewer achievement events, as Markus and Kitayama (1994) have reported that personal achievement events have much weaker correlations with positive affect in Japanese compared with European-Americans,

and in fact can precipitate negative feelings. The results of the present study appear to contradict this, as East Asian respondents listed a higher proportion of achievement content in their positive event nominations than European North Americans. However, other Eastern culture norms, such as the value of being positively viewed by others and the positive connotations of effort, might explain the association, as the types of achievement events listed frequently related to academic success (e.g., getting into university). Although such events are examples of achievement, there may be cultural differences in the degree to which they are seen to relate to personal goals versus fulfillment of the expectations of others. For European North Americans, the positive affective consequences of achievement may relate to enhancement of self-esteem, but for East Asians, achievement may produce positive feelings for other reasons, including its association with significant effort and hard work, which correspond to Eastern cultural values. Some of the cultural differences in nominated savoring strategies appear to reflect this. Unlike European North American respondents, East Asians nominated behaviors that involved making greater efforts with respect to the situation, increasing activity (doing more within the experience or event) and increasing knowledge. At times these strategies were linked such that, for example, doing more was presented as a way to get more knowledge from the experience, or having more knowledge was seen as a way to enhance what one could do while in the experience. In contrast to the relatively simplistic perspective that European North Americans value positive feelings more and East Asians value them less, it may be that the holistic Eastern view extends to positive feelings, such that their value is embedded in their connection to the attainment of other worthy objectives.

In line with this reasoning, previous research has reported a relationship between positive feelings and activities related to future goals in Asian Americans, in contrast to immediate goals in Caucasian Americans (Asakawa & Csikszentmihalyi, 1998). Consistent with this, East Asian respondents in the current study made more reference to future events in their nominations, whereas European North Americans maintained a general focus on present or recent past events.

Interestingly, the broader temporal focus of East Asian respondents in identifying positive events may explain how effort in the present can be associated with positive feelings, through increased salience of the positive feelings to be associated with the resulting positive outcome in the future. With greater awareness of the links between current effort and future enjoyment, East Asian individuals may derive more anticipatory positive affect from situations that on the surface do not appear inherently enjoyable from a Western perspective. Self-nominations of savoring strategies provided some support for this idea, both in the finding of greater reference to anticipation in the Japanese nominations, and Asian respondents' identification of behaviors that involved making greater efforts as ways to increase positive feeling. Behaviors such as practicing more before a game, working hard to finish responsibilities, or studying hard were nominated by Japanese and Asian North Americans as strategies for increasing positive feelings, which contrast quite dramatically with items such as "relax and enjoy it," which frequently appeared in European North American nominations. The flavor of European North American nominations suggested that effort was primarily seen as detracting from positive feelings in the moment, with its future impact less salient.

Happiness is a Social Phenomenon

One of the primary theoretical principles guiding the predictions within the current study was that the enhancement of happiness, like many other cognitive and emotional processes, would reflect the heightened importance of relationships with others in East Asians in comparison to European North Americans. A number of findings from cultural psychology research suggested that East Asian respondents should show a greater focus on others than on the self in their nomination of positive events (e.g., Mesquita & Karasawa, 2002). This finding was not supported, with all groups showing a roughly 50/50 split between focus on self and others. In a comparable open-response format, Stipek, Weiner, and Li (1989) found little support for the characterization of Chinese as other-oriented and Americans as self-focused in their nominations of pride-eliciting events.

Oyserman et al. (2002) noted that the characterization of Americans as less collectivist overlooks the value they place on relational aspects of collectivism, such as belonging and interaction with others. In addition to examining focus, the relative importance of others was examined in the current study by coding the positive events for interpersonal content. This coding category covered a large proportion of the events for all groups, but was significantly more frequent in the nominations of East Asians than those of European North Americans. In a similar vein, Mesquita and Karasawa (2002) found that both independent and interdependent concerns were related to pleasantness of mood in American and Japanese respondents, although interdependent concerns were more predictive than independent for the Japanese.

One of the most notable distinctions in novel strategies nominated by East Asian respondents was the identification of behaviors that extended the connection with others who were involved in the positive event as a strategy for enhancing and prolonging positive feelings. Nominations such as "keep in touch with those people", or references to continuing contact via email or getting together appeared to describe a strategy that reflects interdependent motivations to enhance social connection and maintain relationships, and are consistent with findings of association between positive feelings and feelings of affiliation and connectedness in East Asian individuals (Kitayama, 2001). Directions for future research include developing the definition of these strategies more fully and investigating their rates of endorsement in Western samples. Given that European North Americans also readily acknowledged the important role that others play in their positive experiences, it would be interesting to examine whether individualist objectives overshadow relational concerns when it comes to their strategies for enhancing personal feelings. Moreover, following from some of the Western-based findings regarding the prosocial effects of positive affect, it would be interesting to examine the role that interpersonal savoring strategies might play in establishing and maintaining social relationships, and compare such effects across cultures.

The WOSC as a Measure of Savoring Strategies

Examination of the self-nominated savoring strategies provided an opportunity to identify thoughts and behaviors endorsed by Asian individuals that had not emerged in surveys of Western respondents to date, and also served as an indication of the generalizability of the WOSC. The majority of savoring thoughts and behaviors nominated by Asian respondents matched items already included within the WOSC, with most subsumed under the strategies of Sharing and Memory Building. This may, in part, relate to the higher numbers of women than men in the sample, as women have been found to make greater use of these specific strategies (Bryant and Veroff, 2003), as well as relate to the perceived rarity of the events. This congruence, along with similarities in subscale reliabilities across groups, increases confidence in the validity of the WOSC for assessing savoring behavior in East Asian samples. Moreover, it points to generalities in the repertoire of savoring strategies individuals in varying populations have available to them. The WOSC items are temporally oriented to savoring in the moment, although some are activities that may promote later reminiscence (e.g. took photographs). Across all cultures, the majority of nominated strategies were also temporally oriented to savoring in the moment, which is congruent with the design of the WOSC. However, given that Japanese respondents nominated significantly more anticipation strategies than Asian or European North Americans, the WOSC, with its present focus, may under-assess a significant dimension of Japanese savoring behavior.

In general, many of the expected differences in WOSC strategy endorsement were supported. In both the self-nominations and ratings for vacation, as predicted, European North Americans showed greater utilization of savoring strategies that involve selective attention to personal experience and personal responsibility for the outcome, and outward expression of feelings than East Asians. East Asians showed greater endorsement of strategies that might exert a balancing or minimizing effect on positive feelings. Although Bryant & Veroff (2003) have categorized such strategies as maladaptive, given the influence of dialecticism and interpersonal motivations to

maintain equality of affect, it would be useful to explore the impact of greater Kill-Joy Thinking use in East Asian respondents in further research. Such strategies may have positive consequences in this cultural context that offset their apparent detrimental effect on positive feelings. Expectations regarding comparing were not supported in the current study, possibly because the items loading on this WOSC subscale covered both social comparison and temporal comparison. It may be useful to examine these aspects of savoring behavior separately in future work.

Notably, significant differences in the pattern of endorsement of strategies across cultures emerged between the vacation and grade ratings. With respect to positive feelings associated with a good grade, Asian North Americans showed rates of self-congratulation, selective attention to personal experience, and behavioral expression that were either equal to or greater than those endorsed by European North Americans. Japanese respondents evidenced the expected lower endorsement of these strategies. Asian North Americans also reported more interpersonally involved strategies (Sharing and Comparing) than either Japanese or European North Americans. These results illustrate the importance of situational context in understanding cultural attitudes and practices regarding positive feelings. Stipek et al. (1989) previously reported findings that suggested greater similarities than differences in Chinese and American attributions around personal achievement and noted that certain situational contexts may pull for activation of different sets of cultural beliefs. In the current study, Asian North Americans' greater similarity to European North Americans in savoring strategies with respect to a good grade than vacation may reflect the influence of the shared Western academic context in which this experience took place. Asian North Americans may respond more like European North Americans if the situation primes Western cultural frameworks. This would explain why Japanese respondents, who were likely describing an experience that took place in Japan, did not show a similar pattern. However, given the age of the respondents, vacation experiences generally occurred within a family context, and would therefore be more associated with the East Asian cultural frame. Again this illustrates the complications that

can present when trying to unpack cultural differences in situations where multiple cultural influences may be operating both within and between individuals and situations (Hong et al., 2000).

Does this Mean that East Asians Are Less Happy?

This study utilized several measures of subjective adjustment, which covered both happiness intensity and frequency, and positive, neutral and negative mood in the short term, as well as a more general assessment. Japanese and Asian North American respondents reported lower levels of positive feeling, both in terms of intensity and frequency and more neutral mood than European North Americans. Japanese respondents also reported greater negative mood. Although these findings are consistent with much previous research (Diener et al., 1995; Kitayama et al., 2000, Mesquita & Karasawa, 2002), as noted above, these kinds of self-report ratings and retrospective recall have been criticized as vulnerable to confounds of self-enhancement / self-criticism influences. Nonetheless, Scollon, Diener, Oishi and Biswas-Diener (2004) recently reported that similar mean differences are evident when experience-sampling is used to measure pleasant and unpleasant emotions.

Although East Asian individuals endorsed lower rates of happiness in general, and both lower capacity to enhance their positive feelings and less value of such activities, their ratings of enjoyment intensity and duration for specific recalled events did not suggest lower enjoyment of positive events than Western North Americans. In contrast, they recalled greater levels of positive feeling in relation to the vacation and good grade than Western North Americans, despite endorsing fewer efforts to increase these feelings. There are a number of possibilities why this may be so. As discussed earlier, Westerners may place more focus on primary control and their own efforts to influence their personal situation, whereas East Asians may be more aware of external or situational influences. Interestingly, after completing the WOSC, which required recall and review of one's specific savoring efforts, Japanese respondents rated their level of enjoyment of the events even higher. It is also noted that these particular events, vacation and good grade, correspond well to the

content that emerged as important in East Asian nominations of positive events (interpersonal and achievement), and therefore may be associated with greater enjoyment levels than if respondents were asked to rate a leisure or more solitary experience. Although previous research has generally found East Asians to report lower levels of positive feeling, Oishi (2002) found no such difference in on-line ratings of well-being, and suggested that the global nature of retrospective reports may be a factor in the occurrence of the cultural difference. In support of this line of reasoning, the finding with respect to levels of enjoyment endorsed by East Asians in the current study suggests that cultural differences in positive feeling may be less prevalent when respondents are asked to recall specific situations, rather than make global retrospective ratings.

Cultural Differences in the Relations Between Savoring and Personality Variables

Finally, although the construct of savoring appeared to generalize reasonably well in terms of its relations to other relevant constructs, convergent and discriminant validity relations with personality variables were somewhat less consistent in the East Asian samples. Although Bryant (2003) reported findings of positive correlations between extraversion and all subscales of the SBI, both Japanese and Asian North Americans showed a less consistent pattern of relationship, with less relation between extraversion and anticipating or reminiscing. Similarly, although Bryant found all temporal orientations of savoring to be negatively related to neuroticism in American samples, amongst Japanese, neuroticism was associated with lower capacity to savor in the moment, but did not appear to detract from abilities to enhance positive feelings by anticipating or reminiscing. Asian North Americans showed a similar lack of relationship between neuroticism and reminiscing. In previous research with European North Americans, neuroticism has typically been found to relate more strongly with negative affect than positive affect (Watson, 2000) and it may be through this link that it exerts an influence on savoring. However, in view of the finding that Asian dialecticism is associated with more independence in levels of positive affect and negative affect (Bagozzi et al.,

1999; Schimmack et al., 2002), the effect of variables that operate on savoring indirectly through negative affect might understandably be diluted in East Asian samples.

Savoring: Implications for Mental Well-being

The results of the current research suggest that individuals from both Eastern and Western cultures recognize that specific thoughts and behaviors can serve to enhance the experience of positive feelings, either through prolonging the duration of the feelings or increasing their intensity. In this regard, both the Savoring Beliefs Inventory and the Ways of Savoring Checklist may have clinical applicability as useful tools of assessment for investigating what role individuals' attention to the enhancement of positive feelings and their specific strategies towards this end may be playing in their subjective levels of well-being and life satisfaction, and where therapeutic efforts might best be directed. However, the current research also suggests that variation exists in the degree to which this process of savoring is valued and practiced across cultures. Other researchers have established cultural variation in the prevalence, manifestation, and acknowledgment of lowered mood states, such as clinical depression (see Kirmayer, 2001). Whereas Western diagnostic approaches to depression often focus on the subjective experience of lowered mood, such that depressed mood or anhedonia (loss of pleasure) is a mandatory requirement for a diagnosis of a depressive episode (American Psychiatric Association, 1994), the present findings suggest that these indicators may be less diagnostic for East Asian individuals, whose dialectic perspective may allow them to be more accepting of negative feeling states. In the current study, consistent with previously reported research findings, East Asian individuals reported higher rates of both neutral and negative mood states, and placed less value on efforts to enhance positive feelings. The current findings also point to potentially greater diagnostic relevance of subjective feelings of disconnection from others in East Asians, or certain behavioral changes, such as social withdrawal or decreased goal-directed activity or effort. Although recent developments in Positive Psychology have focused on the enhancement of positive feelings as a fruitful approach to optimizing mental health and well-being (see the

Authentic Happiness Coaching program being developed by Seligman and colleagues, Seligman, 2004), differences in the value placed on efforts to enhance positive feelings may lead us to predict cultural differences in how treatment philosophies and approaches that focus on subjective levels of happiness as opposed to functional indicators of mental well-being are viewed, and how readily such approaches may be accepted as useful. At the same time, although many of the savoring strategies appear to generalize across Eastern and Western cultures, the findings with respect to the influence of both cultural and situational context on specific strategy endorsement suggest that further research exploring the effectiveness of various savoring strategies and the factors that may influence this would be beneficial. As the Positive Psychology movement continues to explore the activities and processes that lead to optimal well-being, cultural considerations can both refine our understanding of what works for whom, as well as identify therapeutic directions that may increase the efficacy of such approaches across varying populations. Certain strategies for increasing positive feelings are likely to be more effective than others when applied by certain individuals towards particular positive experiences. For East Asian individuals, activities that serve to enhance social connections or increase activity in ways that serve culturally-valued objectives may be more fruitful avenues for improving mental well-being than those that focus primarily on the enhancement of positive feelings as a pursuit in its own right, the expression of positive affect, or the enhancement of the individual self. Although social factors are a universally important component of mental well-being, interventions designed to optimize mental well-being will likely be most effective if they acknowledge that these factors may operate differently in different cultural contexts.

Conclusion

This study provided support for the applicability of savoring as a process model of the enhancement of positive feelings beyond a Western context. The Savoring Beliefs Inventory, developed by Bryant (2003) with Western samples as a measure of savoring capacity, appears to generalize reasonably well to East Asian samples. The Ways of Savoring Checklist, which is still in

the process of development and validation, captures much of the commonality in savoring strategies identified by European North American and East Asian respondents. In addition, this study identified some novel savoring strategies whose inclusion might improve the representativeness of this measure.

At the same time, these data add to previous findings of both universality and cultural variation in the experience of positive affect. In line with previous research suggesting lower levels of positive affect, East Asians endorsed lower levels of capacity to enhance positive feelings and rated such efforts as less important. Differences also emerged in the types of events that were identified as associated with positive feelings. However, across cultures, social factors are identified as playing a significant role in the experience of positive feelings. Strategies such as Sharing, Comparing, Continuing Connection, and even Behavioral Expression illustrate that they can also be involved in the process of enhancing those positive feelings. Future research elaborating the distinctions between various interpersonal savoring strategies and exploring their effects on social relationships would likely add to our understanding of how cultural influences on individual and relational motivations impact on positive feelings, and promote the development of interventions for optimizing levels of subjective well-being that generalize beyond Western contexts.

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Appendix A

Measure Set by Data Collection

Data Collection	1	2	3	4	4 (Japanese translation)	5	6
Savoring Beliefs Inventory		●	●	●	●	●	●
Attitudes About Savoring Scale		●	●	●	●	●	
Ways of Savoring Checklist - Vacation	●	●	●	●	●	●	●
Ways of Savoring Checklist - Grade				●	●	●	
Self Construal Scale			●	●	●	●	
Fordyce Happiness Measures			●	●	●	●	
Subjective Happiness Scale		●					
Affect Intensity Measure			●	●	●	●	
Change Scenarios			●	●	●	●	
Eysenck Extroversion Scale			●	●	●	●	
Life Orientation Test			●	●	●	●	
Reminiscing Questions		●					

Appendix B
Questionnaire Instruments

Savoring Beliefs Inventory (Bryant, 2003)
Instructions: For each statement below, please circle the one number that best indicates how true the particular statement is for you. There are no right or wrong answers. Please be as honest as you can.

1. Before a good thing happens, I look forward to it in ways that give me pleasure in the present.
2. It's hard for me to hang onto a good feeling for very long.
3. I enjoy looking back on happy times from my past.
4. I don't like to look forward to good times too much before they happen.
5. I know how to make the most of a good time.
6. I don't like to look back at good times too much after they've taken place.
7. I feel a joy of anticipation when I think about upcoming good things.
8. When it comes to enjoying myself, I'm my own "worst enemy."
9. I can make myself feel good by remembering pleasant events from my past.
10. For me, anticipating what upcoming good events will be like is basically a waste of time.
11. When something good happens, I can make my enjoyment of it last longer by thinking or doing certain things.
12. When I reminisce about pleasant memories, I often start to feel sad or disappointed.
13. I can enjoy pleasant events in my mind before they actually occur.
14. I can't seem to capture the joy of happy moments.
15. I like to store memories of fun times that I go through so that I can recall them later.
16. It's hard for me to get very excited about fun times before they actually take place.
17. I feel fully able to appreciate good things that happen to me.
18. I find that thinking about good times from the past is basically a waste of time.
19. I can make myself feel good by imagining what a happy time that is about to happen will be like.
20. I don't enjoy things as much as I should.
21. It's easy for me to rekindle the joy from pleasant memories.
22. When I think about a pleasant event before it happens, I often start to feel uneasy or uncomfortable.
23. It's easy for me to enjoy myself when I want to.
24. For me, once a fun time is over and gone, it's best not to think about it.

Attitudes About Savoring Scale
Instructions: For each statement below, please circle the one number that best indicates how true the particular statement is for you. There are no right or wrong answers. Please be as honest as you can.
1. It is important to try to extend good feelings to make them last longer.
2. Before a good thing happens, it is valuable to look forward to it in ways that give pleasure in the present.
3. There is not much point in looking back on happy times from the past.
4. One shouldn't look forward to good times too much before they happen.
5. Energy put into making the most of a good time is energy well spent.
6. Coping well when bad things happen is more important than enjoying good things.

7. Telling others about your good fortune is a good way to enjoy it more.
8. Reliving memories of fun times from the past is a worthwhile thing to do.
9. When something good happens, it is beneficial to make the enjoyment of it last longer by thinking or doing certain things.
10. Anticipating what upcoming good events will be like is basically a waste of time.
11. It is beneficial to think back on one's successes from the past.
12. If you are too focused on the good things in your life, you will make others feel bad.
13. Being able to capture the joy of happy moments is a valuable skill.
14. Thinking about good times from the past is a valuable exercise.
15. Thinking about fun times before they've actually taken place usually leads to disappointment.
16. It is worthwhile to be able to fully appreciate good things that happen to you.
17. It's more important to remember one's mistakes than one's successes.
18. Once a fun time is over and gone, it's a waste of time to think about it.
19. It is useful to be able to make yourself feel good by imagining what a happy time that is about to happen will be like.
20. People should be careful not to enjoy things too much.

Ways of Savoring Checklist (Bryant, personal communication)
<u>Instructions</u>: The following pages contain a list of things that people might think or do while they are going through positive events. Please read each of the following statements and indicate how much each of them applies to what you thought and did the last time you (designated event)

When this event happened…
1. I reminded myself how long I had waited for this to happen
2. I reminded myself what a relief it was
3. I told myself how proud I was.
4. I told myself how impressed others must be
5. I tried to take in every sensory property of the event (perhaps blocking out others)
6. I tried to focus on certain sensory properties in particular (sights, sounds, smells, etc.).
7. I opened my eyes wide and took a deep breath -- tried to become more alert.
8. I jumped up and down, ran around or showed other physical expressions of energy.
9. I tried to slow down and move more slowly (in an effort to stop or slow down time).
10. I imagined a whole sequence of good events that could arise as a consequence of this event.
11. I reminded myself how lucky I was to have this good thing happen to me.
12. I thought about sharing the memory of this later with other people.
13. I reminded myself how transient this moment was -- thought about it ending.
14. I tried not to think too much -- just relaxed and enjoyed it.
15. I recalled other good things that have happened to me in the past.
16. I thought about how I'd reminisce to myself about this event later.
17. I thought how I wished this moment could last --reminded myself how I must enjoy it now because it would soon be over.
18. I told myself why I didn't deserve this good thing.
19. I thought only about the present -- got absorbed in the moment.
20. I consciously reflected on the situation -- took in details, tried to remember them, made comparisons.
21. I laughed or giggled.
22. I tried to speed up and move more quickly.

23. I closed my eyes, relaxed, took in the moment.
24. I thought about what a triumph it was.
25. I told myself why I deserved this good thing.
26. I looked for other people to share it with.
27. I thought about ways in which it could have been better.
28. I withdrew and inhibited my feelings (stiffened up).
29. I sighed or made other verbal sounds of appreciation to help myself savor the moment (for example, saying mmm, aahh, humming or whistling).
30. I screamed or made other verbal expressions of excitement.
31. I expressed to others present how much I valued the moment (and their being there to share it with me).
32. I hung around with others who know how to have a good time.
33. I touched myself -- rubbed my stomach, clapped my hands, etc.
34. I physically expressed my feelings to others (hugging, touching).
35. I told myself how it wasn't as good as I'd hoped for.
36. I thought back to events that led up to it -- to a time when I didn't have it and wanted it.
37. I thought about ways in which it could have been worse.
38. I reminded myself that it would be over before I knew it.
39. I reminded myself that nothing lasts forever so I must enjoy this now.
40. I focused on the future -- on a time when this good event would be over.
41. I reminded myself of other places I should be or of other things I should be doing instead.
42. I labeled specific details of the situation explicitly -- tried to find out what it was that I was enjoying and note each aspect explicitly.
43. I took mental photographs.
44. I concentrated and blocked out distractions. I intensified one sense by blocking another.
45. I made myself relax so that I could become more absorbed in the event or activity.
46. I got high or intoxicated to help me enjoy it.
47. I reminded myself that others who were involved in the event were also thinking and feeling the same way.
48. I compared myself to others (asked myself "Am I enjoying this as much as they are?").
49. I made associations with other past pleasant events and reminded myself of them.
50. I thought about what a good time I was having.
51. I thought about what a lucky person I am that so many good things have happened to me.
52. I tried to memorize my surroundings.
53. I talked to another person about how good I felt.
54. I thought about other things that were hanging over me, problems and worries that I still had to face.
55. I thought about how fast the time was passing.
56. I took photographs with a camera to capture the experience.
57. I thought about things that made me feel guilty.
58. I just went through the experience one moment at a time and tried not to look too far ahead.
59. I said a prayer of thanks for my good fortune.
60. I thought about how things might never be this good again.
61. I thought or did something entirely different from any of the above. (Please describe)

Self-Construal Scale (Singelis, 1994)

Instructions: Please respond to the following statements by circling the number that best applies.

1. I enjoy being unique and different from others in many respects
2. I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am
3. Even when I strongly disagree with group members, I avoid an argument.
4. I have respect for the authority figures with whom I interact.
5. I do my own thing, regardless of what others think.
6. I respect people who are modest about themselves.
7. I feel it is important for me to act as an independent person.
8. I will sacrifice my self-interest for the benefit of the group I am in.
9. I'd rather say "No" directly, than risk being misunderstood.
10. Having a lively imagination is important to me.
11. I should take into consideration my parents' advice when making education/career plans.
12. My fate is intertwined with the fate of those around me.
13. I prefer to be direct and forthright when dealing with people I've just met.
14. I feel good when I cooperate with others.
15. I am comfortable with being singled out for praise or rewards.
16. If my brother or sister fails, I feel responsible.
17. I often have the feeling that my relationships with others are more important than my own accomplishments.
18. Speaking up during a class (or a meeting) is not a problem for me
19. I would offer my seat in a bus to my professor (or my boss).
20. I act the same way no matter who I am with.
21. My happiness depends on the happiness of those around me.
22. I value being in good health above everything
23. I will stay in a group if they need me, even when I am not happy with the group.
24. I try to do what is best for me, regardless of how that might affect others.
25. Being able to take care of myself is a primary concern for me.
26. It is important to me to respect decisions made by the group.
27. My personal identity, independent of others, is very important to me.
28. It is important for me to maintain harmony within my group.
29. I act the same way at home that I do in school.
30. I usually go along with what others want to do, even when I would rather do something different.

Happiness Measures (Fordyce, 1987)

Instructions: Use the list below to answer the following question: IN GENERAL, HOW HAPPY OR UNHAPPY DID YOU FEEL OVER THE LAST WEEK? Mark the one statement below that best describes your average level of happiness over last week.

_____10. Extremely happy (feeling ecstatic, joyous, fantastic!)
_____ 9. Very happy (feeling really good, elated!)
_____ 8. Pretty happy (spirits high, feeling good)
_____ 7. Mildly happy (feeling fairly good and somewhat cheerful)
_____ 6. Slightly happy (just a bit above normal)
_____ 5. Neutral (not particularly happy or unhappy)

_____ 4. Slightly unhappy (just a bit below normal)
_____ 3. Mildly unhappy (just a bit low)
_____ 2. Pretty unhappy (somewhat "blue", spirits down)
_____ 1. Very unhappy (depressed, spirits very low)
_____ 0. Extremely unhappy (utterly depressed, completely down)

Consider your emotions a moment further. <u>On average</u>, what percentage of the time did you feel happy last week? What percentage of the time do you feel unhappy over the last week? What percentage of the time do you feel neutral (neither happy nor unhappy) over the last week? Write down your best estimates, as well as you can, in the spaces below. Make sure the three figures add up to 100%.
On average:
The percent of time I feel happy   _____%
The percent of time I feel unhappy   _____%
The percent of time I feel neutral   _____%
                              TOTAL: 100%

Subjective Happiness Scale (Lyubomirsky, 1999)
<u>Instructions:</u> For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.
1. In general, I consider myself: (not a very happy person; a very happy person)
2. Compared to most of my peers, I consider myself: (less happy; more happy)
3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you? (not at all; a great deal)
4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you? (not at all; a great deal)

Big Five Inventory (John, Donahue, Kentle, 1991)
<u>Instructions:</u> Use the spaces to the left to describe yourself as accurately and honestly as possible using the following descriptions. Answer according to how you view yourself right now. Consider the first example: I see myself as someone who... "is talkative." If you strongly agree, you would put a "5" next to Item #1. If you strongly disagree, you would put a "1" next to Item #1. If you disagree a little, you would put a "2," etc.

I see myself as someone who...
1. is talkative
2. tends to find fault with others
3. does a thorough job
4. has a wide range of interests
5. is depressed, blue
6. is original, comes up with new ideas
7. is reserved
8. is helpful and unselfish with others
9. can be somewhat careless
10. is relaxed, handles stress well
11. is curious about many different things
12. is full of energy
13. starts quarrels with others
14. is a reliable worker

15. can be tense
16. tends to be quiet
17. values artistic, aesthetic experiences
18. tends to be disorganized
19. is emotionally stable, not easily upset
20. has an active imagination
21. perseveres until the task is finished
22. is sometimes rude to others
23. is inventive
24. is generally trusting
25. tends to be lazy
26. worries a lot
27. is sometimes shy, inhibited
28. has a forgiving nature
29. does things efficiently
30. can be moody
31. is ingenious, a deep thinker
32. generates a lot of enthusiasm
33. can be cold and aloof
34. makes plans and follows through with them
35. remains calm in tense situations
36. likes to reflect, play with ideas
37. is considerate and kind to almost everyone
38. gets nervous easily
39. is sophisticated in art, music, or literature
40. has an assertive personality
41. likes to cooperate with others
42. is easily distracted
43. is outgoing, sociable
44. has few artistic interests

Affect Intensity Measure (Larsen & Diener, 1987)
Instructions: The following questions refer to emotional reactions to typical life-events. Please indicate how YOU react to these events by placing a number from the following scale in the blank space preceding each item. Please base your answers on how YOU react, not on how you think others react or how you think a person should react.
1. When I accomplish something difficult I feel delighted or elated.
2. When I feel happy it is a strong type of exuberance.
3. I enjoy being with other people.
4. I feel pretty bad when I tell a lie.
5. When I solve a small personal problem I feel euphoric.
6. My emotions tend to be more intense than those of most people.
7. My happy moods are so strong that I feel like I'm in heaven.
8. I get overly enthusiastic.
9. If I complete a task I thought was impossible, I am ecstatic.
10. My heart races at the anticipation of some exciting event.
11. Sad movies deeply touch me.
12. When I'm happy it's a feeling of being untroubled and content rather than being zestful and aroused.

13. When I talk in front of a group for the first time my voice gets shaky and my heart races.
14. When something good happens I am usually much more jubilant than others.
15. My friends might say I'm emotional.
16. The memories I like the most are of those times when I felt content and peaceful rather than zestful and enthusiastic.
17. The sight of someone who is hurt badly affects me strongly.
18. When I'm feeling well it's easy for me to go from being in a good mood to being really joyful.
19. "Calm and cool" could easily describe me.
20. When I'm happy I feel like I'm bursting with joy.
21. Seeing a picture of some violent car accident in a newspaper makes me feel sick to my stomach.
22. When I'm happy I feel very energetic.
23. When I receive an award I become overjoyed.
24. When I succeed at something my reaction is calm contentment.
25. When I do something wrong I have strong feelings of shame and guilt.
26. I can remain calm even on the most trying days.
27. When things are going good I feel "on top of the world."
28. When I get angry it's easy for me to still be rational and not overreact.
29. When I know I have done something very well I feel relaxed and content rather than excited and elated.
30. When I do feel anxiety it is normally very strong.
31. My negative moods are mild in intensity.
32. When I am excited over something I want to share my feelings with everyone.
33. When I feel happiness it's a quiet type of contentment.
34. My friends would probably say I'm a tense or "high-strung" person.
35. When I'm happy I bubble over with energy.
36. When I feel guilty this emotion is quite strong.
37. I would characterize my happy moods as closer to contentment than to joy.
38. When someone compliments me I get so happy I could "burst."
39. When I am nervous I get shaky all over.
40. When I am happy the feeling is more like contentment and inner calm than one of exhilaration and excitement.

Eysenck Personality Inventory – Extraversion Scale (Eysenck & Eysenck, 1975)
Instructions: Please answer each question by putting a circle around the "YES" or the "NO" following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the questions.
1. Do you have many different hobbies?
2. Are you a talkative person?
3. Are you rather lively?
4. Can you usually let yourself go and enjoy yourself at a lively party?
5. Do you enjoy meeting new people?
6. Do you tend to keep in the background on social occasions?
7. Do you like going out a lot?
8. Do you prefer reading to meeting new people?
9. Do you have many friends?
10. Would you call yourself happy-go-lucky?
11. Do you usually take the initiative in meeting new friends?

12. Are you mostly quiet when you are with other people?
13. Can you easily get some life into a rather dull party?
14. Do you like telling jokes and funny stories to your friends?
15. Do you like mixing with people?
16. Have people said that you sometimes act too rashly?
17. Do you nearly always have a "ready answer" when people talk to you?
18. Do you like doing things in which you have to act quickly?
19. Do you often make decisions on the spur of the moment?
20. Do you often take on more activities than you have time for?
21. Can you get a party going?
22. Do you like plenty of hustle and excitement around you?
23. Do other people think of you as being very lively?

Life Orientation Test (Scheier & Carver, 1985)
Instructions: Please answer the following questions about yourself by circling the appropriate number beside each question. Be as honest as you can throughout, and try not to let your response to one question influence your responses to other questions. There are no right or wrong answers. For each of the statements, indicate the extent of your agreement by using the following scale:
1. In uncertain times, I usually expect the best.   0   1   2   3   4
2. It's easy for me to relax.
3. If something can go wrong for me it will.
4. I always look on the bright side of things.
5. I'm always optimistic about my future.
6. I enjoy my friends a lot.
7. It's important for me to keep busy.
8. I hardly ever expect things to go my way.
9. Things never work out the way I want them to.
10. I don't get upset too easily.
11. I'm a believer in the idea that "every cloud has a silver lining."
12. I rarely count on good things happening to me.

Reminiscing Questions.
We are interested in HOW, WHEN and WHY people look back on past positive events. How much do you look back on past positive events:
  When you are feeling sad or blue?
  When you are feeling good?
  To help you handle current problems?
  To escape from the present?
  To make yourself feel good?

Sometimes people do certain things to help them remember past events. When you look back on past positive events, how much do you:
  Look at photos or objects related to the event?
  Play music associated with the event?
  Share your memory with others?
  Try to get a vivid mental picture of the event?
  Try to reenact the event?

Appendix C
Questionnaire Instruments – Japanese Translation

Savoring Beliefs Inventory
以下の問題に、あなたが一番正しいと思うのを1つだけ選択してください。正しい答えと間違い答えはないので、正直にこたえてください。

1. いいことが発生する前、私はそのことを想像して そのときの自分を楽しむ。
2. 私にとって、ながく楽しい気分を保つのが難しい。
3. 過去の楽しいことを振り返るのが好きだ。
4. いいことが発生する前、 そのことを想像するのをこのまない。
5. 楽しいときを満喫する方法はわかっている。
6. いいことが発生した後、いろいろと振り返ることが好きじゃない。
7. いいことがちかずくのを考えるとき、予想する喜びを感じる。
8. 楽しむことに関して、自分自身が邪魔をする。
9. 過去の楽しいことを思い出すことによって、自分はいい 気分になれる。
10. 私にとって、ちかずくことを予想するのが基本的に 時間の無駄だ。
11. いいことが発生するとき、そのことを考えたり、やったり
　　することによって、楽しみをながつずきさせることができる。
12. いいことを思い出にふけるとき、私はよくかなしくなったり 失望的になったりする。
13. 楽しいことが発生する前、頭でそれを楽しむことができる。
14. 楽しいときの喜びを掴むことができない。
15. 楽しいときの記憶を蓄積することが好きで なぜならば 将来それを思い出すことができるからだ。 たのしい
16. 楽しいことが実際に発生する前、それについて興奮する ことは私にとって難しい。
17. いいことがあるとき、私はそれを十分に感知することができる。
18. 過去の楽しいことを思うのが基本的に時間の無駄だと 私はきずいた。
19. ちかずく楽しいことを想像することで、自分はいい気分 になれる。
20. ものごとを存分に楽しむことができない。
21. 楽しい記憶から喜びを再びもえあがらせるのが簡単だ。
22. まだ発生していない楽しいことを考えるとき、私はいつも不安と不快になりはじまる。
23. 私は自分を楽しませたいとき、それを簡単にできる。
24. 私にとって、楽しいことは過ぎたら、もうそれを 考えないほうが一番いい。

Attitudes About Savoring Scale

以下の問題に、あなたが一番正しいと思うのを1つだけ選択してください。正しい答えと間違い答えはないので、正直にこたえてください。

1. いい気分をながつずきさせることは重要だ。
2. いいことが発生する前、それについて想像し、その ときの自分を楽しむことは価値があることだ。
3. 過去の楽しいことを振り返るのは意味のないことだ。
4. 人はいいことが発生する前に、それを望むべきではない。
5. 楽しいことをまんきつするためにエネルギーを使うのは いいことだ。
6. 悪い状態にうまく対応することは楽しいことを満喫する ことよりずっと大切だ。
7. 他人にあなたの運のいいことを言うのは、自分の幸運を もっと楽しむことができる方法だ。
8. 過去の楽しいことを思い出すのはやりがいのあることだ。
9. いいことが発生するとき、そのことを考えたり、やったりする ことによって、
　　その楽しみをながつずきさせることは自分にとって 有利なことだ。
10. もうすぐ起こる良いことを予想するのは基本的に時間の無駄だ。
11. 過去の成功したことを考えることは自分に有利なことだ。
12. もしあなたは人生の中の楽しみにかなり心を集中させ るなら、他人に悪い気分をさせることになる。
13. 楽しいときにその楽しみをつかむことができるのは 価値のある技能だ。
14. 過去の楽しかった時のことを考えるのは価値あることだ。

15. 楽しいことが発生する前に、それについて考えることはいつも 失望をまねくことになる。
16. 自分の経験した良いことを十分に感謝することはやりがい のあることだ。
17. 人が成功したことより、失敗したことを覚えている方が ずっと重要だ。
18. いったん楽しいことがすぎたら、それを考えるのは時間のむだだ。
19. 将来の楽しいことを想像することは、自分をいい気分にさせる ことに役立つ。
20. 人は楽しいことを楽しみすぎないように注意しなければならない。

Ways of Savoring Checklist
1. 自分がどれぐらいこの出来事を待ったのかを おもいださせる。
2. どんなにほっとしたと自分に思い出させる。
3. 自分はどんなに自慢したと言い聞かせる。
4. 他人はどんなに感動したかと自分に言い聞かせる。
5. 私はあの出来事の全ての感覚的なものを受け入れたい(視覚、音、匂いなど)
6. 私は特別な感覚に心を集中した。(他の感覚をふうさする)
7. 私は目をおおきくあけて、深呼吸をして、もっと敏感 になるようにした。
8. 私はとびあがったり、はしったりして体のエネルギーを見せた。
9. ゆっくりしたり、おそく行動したりした。(時間を停止させあるいは遅れさせるために)
10. 今この瞬間の喜びは、前から続いてるものだと思う。
11. こんな楽しいことを経験するのは私がどんなに幸運であるかと 自分にきずがせた。
12. この楽しい記憶を将来他人といっしょに共有する事 を考えた。
13. こんなときはただ一時的なものだと自分にきずかせた。
14. ただリラックスして、楽しむだけにした。
15. 私は過去に発生した楽しいことをおもいだした。
16. 私は将来どうやってこの経験について思い出にふけるのか をおもった。
17. 私はどんなに今のしゅんかんが続くのを願っていた事か
    とおもった。なぜなら、今たのしまなければ、この瞬間は すぐすぎていくんだからである。
18. 自分はこんな楽しみをもらうしかくがないと自分に いいきかせた。
19. 私は現在だけ考えて、集中した。
20. 私は意識的に出来事の内容をきろくしたり、比較したりした。
21. 私は笑ったあるいはくすくすわらった。
22. 私はもっと早く行動するようにこころみた。
23. 私は目を閉じて、リラックスして、このしゅんかんを 十分楽しむ。
24. それがどれだけ素晴らしい大達成だったかと考えた。
25. なぜ自分がこの評価に値するのかを考えた。
26. 一緒に楽しみを共有する人を探した。
27. この出来事がもっとよくなる方法を考えた。
28. 自分は自分の感情を押さえようとした。
29. 私はため息をついたり、何か言葉を発してこの瞬間を味わうことをした。(例えば
    ムー、アアーといったり、口笛をふいたりした。)
30. 私はそのときのうれしさを表すため、きゃっといったり、他の 言葉を発して喜んだ。
31. 私はその経験が私にとってどんなに価値のあるものかをそこにいた他人に表現した
32. 楽しむ方法のわかる人と一緒に時間を過ごした。
33. 私は、自分のからだに触れた。(手をたたく、お腹をさする)
34. 私は体を使って他人に自分の感情を表した。(抱きしめる、触れる)
35. この出来事は自分が思っていたほどいい経験ではないと自分に いい聞かせた。
36. 私はどれほどこの瞬間を待ち続けていたかを思い出した。
37. うまくいかないことをいろいろ考えた。
38. 私はすぐにそれが終わると思った。
39. 楽しみは永遠に続かないので今楽しまなければならないと 私は自分に言い聞かせた。
40. このいい出来事が終るときのことを考えた。
41. 他のいくべき場所と他のやるべきこと を思い出した。
42. 私はこの出来事の内容をはっきりと分類する。それは自分が楽しんだことをみつけて、
    それをはっきりさせる事である。

43. 楽しい瞬間を心に刻み込んだ。
44. 私はその楽しみを何かによって邪魔されないように他の感覚を消し去った。
45. 最初に、この出来事に集中するためにリラックスした。
46. 私はより楽しむために、お酒や薬を飲んだりした。
47. 私は自分に、そこにいた他人が私と同じようにこの
    出来事を考えたり、感じたりしていると言い聞かせた。
48. 私は自分のことを他人と比較した（私は他人とおなじようにこの出来事を
    たのしんでいるのかと考えた）
49. 私は過去の楽しい出来事を思い出し、この事と過去の 楽しいことを関連付けた。
50. 私は今どれほどに楽しんでいるかと自分に言い聞かせた。
51. こんなにたくさん楽しいことを経験したので、私は自分がなんて幸運な人だろうと考えた。
52. 私はまわりのことを記憶するように心掛けた。
53. 私は他人に自分のうれしさを話した。
54. 私は他の問題や不安などいろいろと考えた。
55. 私は時間が経つのがなんて早いんだろうとおもった。
56. 私はその経験を忘れないように写真を撮った。
57. 私は罪悪感を覚えた。
58. 私はその瞬間を楽しみ、将来のことを 深く考えないようにしていた。
59. 自分の幸運に感謝した。.
60. こんなにいい出来事は二度とないと考えた。
61. 私は以上の答えとまったく違うように考えたり、行動した（具体的にかいてください）

Self-Construal Scale
以下の問題に適当な答えを1つ選択してください。

31. 私は他人といろんな面で違うのをたのしんでいる
    自分のことをユニークだと思っている
32. 例え、その人が私より年上であったとしても、あったばかりの人をファースト
    ネームで呼ぶのに慣れている。
33. 私は自分の意見がグループの人の意見と全く異なるならば、議論をさける。
34. 私は権力のある人を尊敬する。
35. 私は他人のことを気にせず、自分のことをやる。
36. 私は謙虚な人を尊敬する。
37. 自分の力で生きている人間のように振る舞うのが大切だと思う。
38. 私は自分のグループの利益のために、自分のことを犠牲にする。
39. 誤解の危険をおかすより、直接「ノー」という。
40. いきいきとした想像力をもつことは大切だ。
41. 学校や仕事に関して、両親の意見を受け入れるべきだと思う。
42. 私の運命はまわりの人の運命と関わっていると感じている。

43. 初対面の人と話すことが出来る。
44. 他人と協力することが好きだ。
45. 自分だけ誉められることに慣れている。
46. もし自分の兄弟が失敗したら、自分にも責任があると思う。
47. 私はいつも、自分の成功より他人との関係の方がもっと大事だ、と思う。
48. クラスで（あるいは会議中）話すことは私にとって問題ではない。
49. 自分の教授あるいは上司にバスで席をゆずることができる。
50. 私はどんな人といっしょにいても、いつも同じように振る舞う。
51. 私の幸せは回りの人の幸せに深く関わっている。
52. 健康でいることは何よりも大切だと思う。
53. もし、あるグループが私を必要としたら、そのグループは好きじゃなく
    てもそこにいるつもりだ。
54. 私は自分に有利なことをやる。他人にどう影響するのかは関係ないと思う。

55. 自分自身のことを考えることが自分にとって大切なことだ。
56. グループの決定を尊重するのは大切だ。
57. 自分のアイデンティティーは他人に頼らない。
58. グループに合わせることは大事だ。
59. 私は学校と家で同じように振る舞う。
60. 自分が違うことを望んでいても、私はいつも他人に合わせる。

Happiness Measures

あなたはこの一週間の間に、大体どれぐらい幸せあるいは不幸せを感じていますか。以下のものを1つだけ 選択してください。

```
_____10. 非常にうれしい（有頂天、喜び、すばらしい）
_____ 9. とてもうれしい（とてもいい気分、意気揚揚たる）
_____ 8. かなりうれしい（興奮する、いい気分）
_____ 7. まあまあうれしい（まあまあいい気分、多少きげんのいい）
_____ 6. すこしうれしい（普通よりすこしいい）
_____ 5. 中間的（うれしくもうれしくなくもない）
_____ 4. すこし不快（ふつうより少し悪い）
_____ 3. まあまあ不快（ちょっとうれしくない）
_____ 2. かなり不快（多少鬱、気分わるい）
_____ 1. とても不快（元気がない、やるきがない）
_____ 0. 非常に不快（非常に元気がない、やる気が全然ない）
```

あなたの感情をもう少し深く考えてください。平均的に、先週は、どれぐらいの割合であなたはうれしいと思ったのか。どれぐらいの割合であなたはうれしくないと思ったのか。どれぐらいの割合であなたは中間的な感情
（うれしくもうれしくなくもない）をもっていたのか。正直に答えを下に書いてください。3つの数字の和が100パーセントになるようにお願いします。

平均的に：
うれしい　　　　_____％
うれしくない　　_____％
中間的　　　　　_____％

Affect Intensity Measure

イントロダクション：下のアンケートは典型的な生活の出来事に対する感情的な反応について調べています。これらの出来事に対してあなたがどう反応するか、それぞれの質問の前の空欄に下に示してある数字を書いてください。
1. 何か難しいことを成し遂げたとき、わたしは喜んだり元気づけられたりする。
2. わたしが幸せを感じるとき、それは元気あふれる状態の強い一種だ。
3. わたしは他人といることを楽しむ。
4. ウソをついたときすごく悪く感じる。
5. ちょっとした個人的な問題を解決したとき、幸福感に満たされる。
6. わたしの感情は多くの人と比べると起伏が激しい。。
7. わたしの幸せな雰囲気は自分が天国にいるかのようにすごく強い。
8. わたしは非常に熱狂的になる。
9. 不可能と思ったことを成し遂げるとわたしは有頂天になる。
10. 何かワクワクする予期においてわたしの心臓はとても早くなる。
11. 悲しい映画はわたしに深く影響をあたえる。
12. わたしが幸せなとき、その感情は興奮することよりも静かで安定しているものである。
13. はじめてグループの前で話すとき、私の声は震えて心臓が早くなる。
14. 何かいいことが起こったとき、わたしはたいてい他の人よりももっともっと大喜びする。
15. 友達はわたしのことを感情的だというと思う。

16. わたしが興味を持ったときや熱狂的になったときよりも安心感や平和感を感じたときの思い出が
　　　1番好きだ。
17. 悪く傷ついている人の光景は自分に強く影響をあたえる。
18. 良い気分の時、いい状況から本当に楽しめるようになるのはたやすい事だ。
19. 冷静で落ち着いている人とは私のことである。
20. とてもうれしい時、私は自分自身がこの幸せを壊しているように感じる。
21. 新聞で強烈な自動車事故の写真を見ると、気分が悪くなる。
22. 私はうれしい時、とても元気である。
23. 私は賞を手にした際、大喜びする。
24. 私は何かに成功したとき、冷静なまま充実感を享受する。
25. 間違ったことをした時、自分自身に対して羞恥心や罪悪感を強く抱く。
26. 本当に辛い日であっても冷静にいることが出来る。
27. 物事がうまくいっているとき、有頂天になる。
28. 私は怒っている時でも、取り乱すのではなく、じっと理性的でいることが出来る。
29. 物事がとてもうまくいったとわかった時、興奮するのではなく、安堵し満足してしまう。
30. 私が不安を感じる時、それはとても強いのが普通だ。
31. 私はネガティブ（落ち込んでいたり、不愉快）な気持ちでいる時、それは
　　　そんなにひどくはない。
32. 私は何かに興奮している時、その気分をみんなと分かちあいたいと思う。
33. 私が幸せだと感じる時、それは穏やかな種類の満足である。
34. 私の友達は、おそらく私のことを神経過敏だとか“神経質な”人間だというだろう
35. 私は幸せな時、エネルギーいっぱいにはじける。
36. 私が悪いことをしたと思う時、この感情はとても強い。
37. 私は、自分の幸せな気分は、喜びよりも満足に近いと特徴付ける。
38. 誰かが私をほめる時、はちきれるほどの幸福感を得る。
39. 私は不安な時、体が震える。
40. 私が幸せな時、その気持ちは、快活な気持ちや興奮よりも、満足や精神の　安定に近い

Eysenck Personality Inventory – Extraversion Scale
方法：以下の各質問に対して、「はい」か「いいえ」を〇で囲って答えてください。
正しい答え、間違った答え、あなたをだましたりする目的の質問等は含まれておりません。出来るだ
け速く、そして質問の内容を完璧に理解しようと考え過ぎずに答えてください。

1. あなたは様々な趣味を持っていますか？
2. あなたは話好きな性格である？
3. あなたはどちらかというと活発で陽気な性格ですか？
4. にぎやかなパーティをいつも開放的に楽しむことができますか？
5. あなたは新しい人との出会いに楽しみを感じますか？
6. 社交の場では目立たないようにする傾向がありますか？
7. あなたは外に出かけるのが好きですか？
8. あなたは新しいひとに出会うことよりも、本を読むのを好みますか？
9. あなたにはたくさん友達がいますか？
10. あなたは自分が気楽な人間だと思いますか？
11. あなたは自分から率先して新しい人達に会おうとしますか？
12. 他の人と一緒にいるとき、あなたは大抵静かですか？
13. どちらかといいうとつまらないパーティに、活気をもたらすことが簡単に出来ますか？
14. 友達に冗談や面白いことを話すのが好きですか？
15. 人々の群れの中にいるのは好きですか？
16. あなたは時々はやまった行動をとると他の人に言われたことがありますか？
17. 人が話しかけてくる時、ほとんどいつも答えを用意して待っていますか？
18. 素早く行動を起こすことが好きですか？
19. 即座に決断をよくしますか？

20. 自分の許容時間よりもっと色々なことをしてしまうことがよくありますか？
21. あなたはパーティを運営することが出来ますか？
22. 周囲で大騒ぎや刺激がたくさんあるのが好きですか？
23. 他の人はあなたの事をとても活発な人だと思っていますか？

Life Orientation Test
生活傾向
説明：あなた自身に関する以下の質問に答えて、最も当てはまると思う数字にそれぞれ丸をつけてください。一つの質問に対する回答が他の質問に対する回答に影響しないように、それぞれの質問に、あなたの思うとおり正直に答えてください。正しい答えや間違った答えはありません。
それぞれの意見について、どの程度賛成できるのか数字で表してください：

1. はっきりしない事について、私はたいてい 一番良い結果を予想する。
2. 私にとって、リラックスすることは簡単だ
3. 私にとって都合の良くないことは、よく起こる。
4. 私は、いつも物事の良い面を見ている。
5. 私は、いつも自分の将来に楽観的だ。
6. 私にとって、友達を持つことはたくさんの楽しみ や喜びを得られることだ。
7. 私にとっていつも忙しくしていることは大切だ。
8. 私は自分がどのような方向に進もうとしているのか 考えない。
9. 物事は、決して私の思い通りに行かない。
10. 私は簡単には怒らない。
11. 私は、暗い状況でも良い面（希望）は見出せると いう考えを信じる。
12. 私は、自分に起こった良いことをめったに数えない。