Trait Meta-Mood and Subjective Happiness: A 7-week Prospective Study

Natalio Extremera · Jose Martín Salguero · Pablo Fernández-Berrocal

Abstract The primary aim of the current study was to replicate and extend previous findings by examining the relationship between trait meta-mood and levels of subjective happiness in a 7-week follow-up study. Participants were 192 undergraduate students (155 females) who completed self-report measures of trait meta-mood and subjective happiness. After 7 weeks, 155 students completed the subjective happiness scale again. Focusing first on cross-sectional analysis, meta-mood dimensions were found to be moderately related to levels of subjective happiness. Next, along with initial levels of subjective happiness, we found that meta-mood dimensions independently predicted prospective levels of subjective happiness over a 7-week follow-up. These findings provide some preliminary evidence on the prospective value of meta-mood dimensions as relevant individual differences involved in the maintenance of emotional well-being indicators.

Keywords Trait meta-mood · Perceived emotional intelligence · Subjective happiness · Prospective study

1 Introduction

The subjective well-being (SWB) construct has been the subject of intense and ongoing research over recent decades. Specifically, researchers have been interested in the cognitive and affective factors that help to explain individual levels of SWB. Accordingly, many correlates of SWB have been examined in efforts to understand its causes and maintenance (Diener et al. 2003). Although traditionally a great deal of attention has been focused on demographic and socio-economic variables (Argyle 1999), more recently research on SWB and happiness has turned its attention towards understanding their relationship with personality attributes (Diener and Lucas 1999) and with different cognitive and motivational processes (Lyubomirsky 2001). For example, research has found that personality traits such as neuroticism and extraversion (DeNeve and Cooper 1998), self-esteem (Diener and Diener

N. Extremera (✉) · J. M. Salguero · P. Fernández-Berrocal
Facultad de Psicología, Campus de Teatinos, 29071 Málaga, Spain
e-mail: nextremera@uma.es

1995) or optimism (Lucas et al. 1996) have exhibited consistent correlations with SWB indicators; furthermore, and as Diener et al. (2003) suggest, it is likely that additional narrow traits or nontrait personality factors are also related to the SWB construct. Researchers conducting empirical studies on affective and cognitive processes have described several narrow constructs that have been shown to maintain, and even enhance, enduring SWB (Lyubomirsky 2001). One such construct that may partly account for individual differences in SWB is the meta-experience of emotions or meta-mood, which concerns the description of thoughts and feelings about one's own emotions and emotional experience (Mayer and Gaschke 1988; Mayer and Stevens 1994).

Mayer and Gaschke (1988) suggested that the experience of mood has at least two components: the direct experience of one's moods and the meta-experience of those moods. The latter component is called meta-mood experience, because it pertains not to the immediate experience of feeling states but rather to a subjective and reflective experience involving thoughts and feelings about one's moods (Mayer and Stevens 1994). This reflective process is particularly relevant to the understanding of individual differences in how people reflectively monitor emotions by attending to them, and clearly understand and attempt to regulate their moods (Mayer and Gaschke 1988; Mayer and Stevens 1994). Since its introduction in 1995, the Trait Meta-Mood Scale (TMMS, Salovey et al. 1995) has been widely used as a measure for assessing stable individual differences in people's beliefs to attend to, discriminate and regulate their moods and emotions. Besides, given its subjective nature, this instrument provides an index of what researchers have called a proxy for Perceived Emotional Intelligence (Extremera and Fernández-Berrocal 2005; Salovey et al. 2002).

From this perspective, a disposition to direct attention towards one's affective state, the ability to clearly perceive one's current state, and the ability to implement effective mood regulation strategies help to determine positive functioning and are essential for adaptive coping with stress over the life span (Mayer and Stevens 1994; Salovey et al. 1999). Theoretically, individuals should allocate some attention to their affective states so as to subsequently recognize the state that has become present in their consciousness. The discrimination and labelling of one's affective state would allow one to turn attention to other concerns, and may be a prerequisite for guiding effective regulatory actions and improving affective well-being (Palmer et al. 2003; Salovey et al. 1995).

Consistent with this view, higher scores on the TMMS have been found to be associated with less psychological maladjustment—including lower reported levels of symptoms, anxiety and depression (Extremera and Fernández-Berrocal 2006; Thompson et al. 2007), lower rates of borderline personality disorders (Leible and Snell 2004), and to be predictive of coping behaviours (Gohm and Clore 2002; Salovey et al. 2002). Furthermore, TMMS scores have traditionally been related to indicators of psychological adjustment such as satisfaction with life, positive affectivity or psychological well-being (Augusto-Landa et al., in press; Goldman et al. 1996; Shulman and Hemenover 2006). Experimental studies also support the relation of TMMS scores to psychological adjustment. For example, individuals scoring higher on the meta-mood dimensions of the TMMS are more likely to rebound from induced negative mood, show a stronger reduction in ruminative thought over time (Salovey et al. 1995), experience less intense physiological reactions as measured by cortisol release and blood pressure changes (Salovey et al. 2002), and report less reduction of positive affect and intrusive thoughts following a distressing stimulus (DeVellis et al. 1998; Ramos-Díaz et al. 2007). With regard to the relationship between TMMS and well-being indicators, some correlational studies have found that emotional repair is uniquely related to well-being (Thompson et al. 2007), while others have found that mood clarity is the most significant predictor of life satisfaction when positive and negative affect are statistically controlled (Extremera et al. 2009; Palmer et al.

2002). Similarly, mood clarity and emotional repair were found to be significant predictors of life satisfaction independently of well-known mood state constructs and personality traits in adults and adolescents (Extremera et al. 2007; Extremera and Fernández-Berrocal 2005; Martínez-Pons 1997; Wong et al. 2007). For the case of emotional attention, past research have evidenced contradictory or null findings in the prediction of well-being indicators (Augusto-Landa et al., in press; Extremera et al. 2007), therefore, in order to have a clearer interpretation of specific predictors, in this study we focused in the most predictive dimension of TMMS: mood clarity and emotional repair. However, as evidenced by the review literature, most prior studies used a cross-sectional rather than prospective design, failed to capture change over time and left the question of causal direction unanswered. Prospective research would seem especially important for meta-mood research, as it can shed light on causal mechanisms between TMMS scores and well-being by examining changes over time. Moreover, stronger evidence of the causal role of TMMS dimensions in well-being indicators would be provided by the demonstration that these meta-experiences are associated prospectively with psychological well-being. The present study is one of the first empirical investigations to examine the prospective value of TMMS as predictor of happiness.

Bearing in mind the above considerations, the current study examined the influence of meta-mood dimensions on individuals' levels of subjective happiness over a 7-week prospective interval, after controlling for Time 1 subjective happiness. It was hypothesized that mood clarity and emotional repair would relate to levels of prospective happiness. Furthermore, it was hypothesized that meta-mood dimensions would make a significant and unique contribution to levels of subjective concurrent happiness at a 7-week follow-up, controlling initial levels (Time 1) of subjective happiness.

2 Method

Participants and Procedure. Participants, who participated voluntarily in the study as requirement for a psychology course, consisted of 192 Spanish university students from University of Málaga (37 male, 155 female), of whom 155 (26 male, 129 female) returned to complete follow-up questionnaires 6–8 weeks later. They were informed that they would be asked to participate in a research study on personality and emotions and received course credit for their participation. The questionnaires were completed during one class under the supervision of one of several research assistants. Participants from the initial sample who failed to return for the Time 2 follow-up session did not significantly differ in any variable measured in this study from those who completed the questionnaires at both time points. Ages ranged from 20 to 53 years ($M = 23.37$, SD $= 5.12$).

Participants then signed an informed consent form and completed the Time 1 instrument package in the middle of the first academic semester. The package of questionnaires contained the Trait Meta-Mood Scale (TMMS), and the Subjective Happiness Scale (SHS) along with a larger battery of questionnaire as part of a larger study. Participants were debriefed following completion of the questionnaires. After 7 weeks, 155 participants (80% of the initial sample) returned and completed the SHS a second time.

3 Materials

Trait Meta-Mood Scale (TMMS, Salovey et al. 1995). The TMMS was designed to assess how people reflect upon their moods, and thus conceived as an index of perceived

emotional intelligence (Salovey et al. 2002). The scale has three factors that provide three subscale scores: Attention to Feelings (relating to monitoring of emotions); Clarity of Feelings (relating to the ability to discriminate between emotions); and Mood Repair (relating to the ability to regulate unpleasant moods or maintain pleasant moods). We used the well-validated Spanish shorter version of the TMMS (Fernández-Berrocal et al. 2004). Further details on the scoring, reliability, and validity of the Spanish version of TMMS can be found in Fernández-Berrocal et al. (2004). In our study, alpha level for mood clarity was 0.87 and for emotional repair was. 86, which indicates a high level of internal consistency for TMMS dimensions.

The Subjective Happiness Scale (SHS, Lyubomirsky and Lepper 1999). The SHS is a widely used, 4-item global assessment of happiness. Two items request respondents to describe themselves using both absolute ratings and ratings relative to peers, while the other two items offer brief descriptions of happy and unhappy individuals and ask respondents about the extent to which each description describes them. Each item was assessed on a 7-point Likert scale (e.g., Item 1—In general I consider myself: $1 = Not\ a\ very\ happy\ person$ to $7 = A\ very\ happy\ person$). Across 14 samples, the SHS has demonstrated good psychometric properties, such as test–retest reliability, discriminant validity and convergent validity (Lyubomirsky and Lepper 1999). Since SHS are less time-intensive, theory-driven, and with good psychometric properties, we have chosen it instead of other more large scales and with conceptual issues such as Oxford Happiness Scale (see Kashdan 2004). Besides, Spanish SHS have recently been translated into Spanish with satisfactory psychometric qualities. We used a well-validated Spanish version (Extremera and Fernández-Berrocal, under review). In this study, coefficient alpha for Spanish SHS was 0.80 in time 1 and 0.79 in time 2, which is consistent with reliability data reported in original study (Lyubomirsky and Lepper 1999) and in Spanish population (Extremera and Fernández-Berrocal, under review).

4 Results

4.1 Descriptive Analyses

Means, standard deviations, and Pearson correlations for the study variables are shown in Table 1. Higher clarity and repair were moderately associated with subjective happiness at Times 1 and 2. As expected, happiness at time 1 was positively and significantly correlated to happiness 7 weeks later.

4.2 Hierarchical Regression Analyses

Hierarchical regression analyses was used to assess the predictive power of TMMS (i.e., R^2) beyond and above socio-demographic dimensions (age and sex) and baseline (Time 1) levels of subjective happiness, as well as the unique predictive power of each dimension of TMMS (i.e., β). Time 2 subjective happiness scores served as the criterion variable. To test the unique contribution of TMMS scores to subjective happiness levels, the TMMS dimensions factor was entered in the third step after controlling for age and gender in the first step and baseline (Time 1) levels of subjective happiness in Step 2, The final equation was significant, $F(5,146) = 36.228$, $p < 0.01$, $R^2 = 0.55$ (see Table 2). At step one, none socio-demographic dimensions explained happiness in Time 2. At step two, the inclusion of baseline levels of subjective happiness predicted significantly happiness at time 2

Table 1 Means, Standard Deviations and correlations for the variables of interest

	1	2	3	4
1.TMMS-Clarity	–			
2.TMMS-Repair	0.42**	–		
3. Happiness T.1	0.34**	0.49**	–	
4. Happiness T.2	0.33**	0.51**	0.72**	–
M	3.34	3.29	5.02	5.10
SD	0.72	0.78	1.11	1.06

** $p < 0.01$; * $p < 0.05$

Table 2 Hierarchical regression analyses showing amount of variance in subjective happiness at Time 2 accounted for by initial levels of subjective happiness and TMMS dimensions

Subjective happiness	R^2	F	β	p	ΔR^2
Step 1: Socio-demographic variables	0.00	0.34			0.00
Sex			−0.06	0.41	
Age			−0.04	0.96	
Step 2	0.51	52.22			0.51**
Happiness Time 1			0.60	0.00**	
Step 3	0.55	36.22			0.04**
Clarity			0.06	0.32	
Repair			0.20	0.01**	

** $p < 0.01$

($\beta = 0.60$, $p < 0.01$; $\Delta R^2 = 0.51$). Finally, there was a significant R-change when TMMS dimensions were entered in step 3. Specifically, our regression analyses revealed a significant and unique contribution of the mood repair to the prediction of subjective happiness at the 7-week follow-up ($\beta = 0.20$, $p \leq 0.01$; $\Delta R^2 = 0.04$), over and above the significant contribution of baseline levels of subjective happiness.

5 Discussion

The goal of this study was to assess the predictive value of meta-mood dimensions on subjective happiness in a prospective 7-week follow-up study.

Consistent with findings obtained in previous cross-sectional and experimental studies on perceived emotional intelligence evaluated by TMMS and psychological adjustment (Salovey et al. 1995, 2002; Thompson et al. 2007), the present study found that high scores on mood clarity and emotional repair were moderately and significantly associated with higher levels of concurrent and prospective happiness in university students. With regard to the prospective effects, our results provide some empirical evidence that trait meta-mood, and specifically mood repair, can have some prospective value in predicting subjective happiness beyond initial levels of happiness. That is, how people feel about and manage affective information is an important predictor of SWB (Mayer and Salovey 1995). Such findings are supported by previous research in which belief in one's ability to terminate or alleviate a negative mood state was associated with less passive (and more active) coping, perceptions of repeated laboratory stressors as less threatening (Salovey et al. 2002), decreased negative affect and increased positive affect following an experimental task

(Hemenover et al. 2008), lower symptoms reporting (Thompson et al. 2007) and higher emotional adjustment (Berking et al. 2008).

Although the predicting effects of TMMS dimensions, and specifically mood repair, were not large (explaining just 4% of the variance), incremental values such as these are not uncommon in prospective studies. It should be noted that these effects are above and beyond the impact of concurrent levels of happiness over time. As some researchers have pointed out, when studying new theoretical constructs, even findings that account for small amounts of variance independent of other well-known personality variables should be considered as important advances in the understanding of the mechanism involved (Mayer et al. 2000). Furthermore, recent studies have revealed that a person's general beliefs about repairing mood states predicts repair success, indicating that such perceptions reflect more than simple self-construal. In this regard, Hemenover et al. (2008) provided some empirical evidence showing that participants with high expectancies of repair success (and those who attend to and understand their affect) experienced the largest decreases in negative affect and the largest increases in positive affect following diverse repair tasks. Thus, participants who believe they can successfully regulate their affective states can actually do so. These findings support the influence of regulatory perceptions on regulatory outcomes, and suggest a number of interesting avenues for further exploration. For example, more research would be necessary to examine how reflective processes that accompany mood states contribute and foster the positive affect that is needed (i.e., the requisite confidence, enthusiasm and excitement) for executing our intentions to regulate emotions in spite of challenging demands. Despite our preliminary evidence on the prospective value of the TMMS in relation to happiness, the present study should be viewed in the light of certain limitations which need to be addressed. First, the participants were undergraduate students, and our findings from this relatively young and well-educated sample may not necessarily generalize to clinical or normative populations. Therefore, these findings need to be replicated with older participants and those from community-based samples, however the target sample is arguably an important one for whom emotional well-being may be especially important issues, given the pressure of the new responsibilities of adulthood and higher education.

In a similar vein, the conclusions of the present study may be limited by the higher proportion of female undergraduates compared to male counterparts in the sample (5–1), since some empirical evidences on gender differences in meta-mood dimensions and happiness have been reported. For example, previous studies have found that women report experiencing greater happiness and more intense positive emotions than men (Nolen-Hoeksema and Rusting 2003) which might influence in the present results. Similarly, some gender differences have been reported for meta-mood dimensions, with females reporting greater attention to feelings and males reporting higher clarity and repair moods (Extremera et al. 2007; Thayer et al. 2003). Therefore, the present findings for meta-mood dimensions might be less generalizable to males, given the smaller number compared with females in the present study. This pattern of gender differences findings in positive emotional well-being provides support that females are more emotional and sensitive than men (experiencing both more positive and negative feelings) and, in same degree, this greater emotionality might translate into greater intensity of positive feelings when emotions do arise, explaining higher happiness in women (Brody and Hall 2000). Also, gender related factors in well-being such as personality, social context, gender roles or cultural variations are probably underlying these gender differences (Lucas and Gohm 2000), and deserve further examination. However, with independence of number of possible processes in these gender differences, future work would benefit from an assessment of influence of

meta-mood dimensions on happiness that incorporated similar percentages of females and males and take into account the differential base rates of positive emotional well-being across the sexes. Likewise, although TMMS dimensions were found to be significantly associated with happiness, it is important to bear in mind that other constructs of well-being might be important predictors of psychological functioning, even though not assessed in the present study. It would be necessary to examine the effects of the TMMS dimensions for predicting the outcomes of other measures of subjective well-being (e.g., satisfaction with life; Diener et al. 1985), or even to take into consideration the potential peculiarities and implications of using instruments assessing hedonic (e.g., positive affect, life satisfaction, happiness) and eudaimonic (e.g., self-acceptance, positive relations, autonomy, purpose in life) aspects of well-being (Ryan and Deci 2001). Finally, although the present study examined the influence of TMMS dimensions on subsequent measures of subjective happiness in a 7-week follow-up study, we cannot draw any inferences about lasting effects. Our study looked at a 7-week time lag between two assessment points, but this does not capture long-term effects. Hence, a longer-term prospective study (such as a 1-year longitudinal design) applying all of the same measures at both time points would help to clarify the long-term causal relations and to specifically examine which TMMS dimensions contribute to a happier life overall.

In summary, our study provides evidence that meta-mood experiences play an independent role in subjective happiness, regardless of initial levels of happiness. Theoretically, our findings highlight the importance of meta-mood experience as a determinant of individual differences in the psychological well-being spectrum, and contribute evidence supporting the inclusion of meta-mood experiences in the long list of personality traits consistently related to SWB (Diener and Lucas 1999). On the basis of the present findings and those from experimental studies (Ramos et al. 2007; Salovey et al. 1995), it is reasonable to suppose that improvements in self-beliefs about understanding our own emotions and the repair of negative moods might lead to durable changes in happiness.

As regards clinical implications, these findings suggest that recent positive psychology interventions (Sin and Lyubomirsky 2009) could profit from a consideration of increasing positive self-beliefs about moods and emotions. According to this view, individuals who can clearly label their feelings and believe they can repair negative moods might be able to minimize the potentially deleterious impact of stressful events, and could cultivate more positive emotions (Salovey et al. 1999). An interesting research line would involve examining the effectiveness of interventions aimed at increasing personal beliefs in relation to the accurate perception, clear labelling and effective regulation of our moods, as a promising approach to the enhancement of personal well-being.

References

Argyle, M. (1999). Causes and correlates of happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 353–373). New York: Russell Sage Foundation.

Augusto-Landa, J. M., Pulido-Martos, M., & Lopez-Zafra, E. Does perceived emotional intelligence and optimism/pessimism predict psychological well-being? *Journal of Happiness Studies* (in press).

Berking, M., Orth, U., Wupperman, P., Meier, L. L., & Caspar, F. (2008). Prospective effects of emotion-regulation skills on emotional adjustment. *Journal of Counseling Psychology, 55*, 485–494.

Brody, R. L., & Hall, J. A. (2000). Gender, emotion, and expression. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (pp. 338–349). Nueva York: The Guilford Press.

DeNeve, K., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin, 124*, 197–229.

DeVellis, R. F., Carl, K., DeVellis, B. M., Blalock, S. J., & Patterson, C. C. (1998). Correlates of changes in mood following a mood induction in osteoarthritis patients. *Arthritis Care and Research, 11*, 234–242.

Diener, E., & Diener, M. (1995). Cross-cultural *correlates* of life satisfaction and *self-esteem*. *Journal of Personality and Social Psychology, 68*, 653–663.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality and Social Psychology, 69*, 71–75.

Diener, E., & Lucas, R. E. (1999). Personality and subjective well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 213–229). New York: Russell-Sage.

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being. *Annual Review of Psychology, 54*, 403–425.

Extremera, N., Duran, A., & Rey, L. (2009). The moderating effect of trait meta-mood and perceived stress on life satisfaction. *Personality and Individual Differences, 47*, 116–121.

Extremera, N., Durán, A., & Rey, L. (2007). Perceived emotional intelligence and dispositional optimism–pessimism: Analyzing their role in predicting psychological adjustment among adolescents. *Personality and Individual Differences, 42*, 1069–1079.

Extremera, N., & Fernández-Berrocal, P. (2005). Perceived emotional intelligence and life satisfaction: Predictive and Incremental validity using the Trait Meta-mood Scale. *Personality and Individual Differences, 39*, 937–948.

Extremera, N., & Fernández-Berrocal, P. (2006). Emotional intelligence as predictor of mental, social, and physical health in university students. *The Spanish Journal of Psychology, 9*, 45–51.

Extremera, N., & Fernández-Berrocal, P. Psychometric Properties of the Spanish Subjective Happiness Scale. *European Journal of Psychological Assessment* (under review).

Fernández-Berrocal, P., Extremera, N., & Ramos, N. (2004). Validity and reliability of the Spanish modified version of the Trait Meta-Mood Scale. *Psychological Reports, 94*, 751–755.

Gohm, C. L., & Clore, G. L. (2002). Four latent traits of emotional experience and their involvement in attributional style, coping and well-being. *Cognition and Emotion, 16*, 495–518.

Goldman, S. L., Kraemer, D. T., & Salovey, P. (1996). Beliefs about mood moderate the relationship of stress to illness and symptom reporting. *Journal of Psychosomatic Research, 41*, 115–128.

Hemenover, S. H., Augustine, A. A., Shulman, T., Tran, T. Q., & Barlett, C. P. (2008). Individual differences in negative affect repair. *Emotion, 8*, 468–478.

Kashdan, T. B. (2004). The assessment of subjective well-being (issues raised by the Oxford Happiness Questionnaire). *Personality and Individual Differences 36,* 1225–1232.

Leible, T. L., & Snell, W. E., Jr. (2004). Borderline personality disorder and multiple aspects of emotional intelligence. *Personality and Individual Differences, 37*, 393–404.

Lucas, R. E., Diener, E., & Suh, E. M. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology, 71*, 616–628.

Lucas, R. E., & Gohm, C. L. (2000). Age and sex differences in subjective well-being across cultures. In E. Diener & E. M. Suh (Eds.), *Culture and subjective well-being* (pp. 291–317). Cambridge, MA: MIT Press.

Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist, 56*, 239–249.

Lyubomirsky, S., & Lepper, H. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*, 137–155.

Martínez-Pons, M. (1997). The relation of emotional intelligence with selected areas of personal functioning. *Imagination, Cognition and Personality, 17*, 3–13.

Mayer, J. D., & Gaschke, Y. N. (1988). The experience and meta-experience of mood. *Journal of Personality and Social Psychology, 55*, 102–111.

Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology, 4*, 197–208.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 396–420). Cambridge, UK: Cambridge University Press.

Mayer, J. D., & Stevens, A. (1994). An emerging understanding of the reflective (meta-) experience of mood. *Journal of Research in Personality, 28*, 351–373.

Nolen-Hoeksema, S., & Rusting, C. L. (2003). Gender differences in well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 330–350). New York: Russel Sage Foundation.

Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and Individual Differences, 33*, 1091–1100.

Palmer, B., Gignac, G., Bates, T., & Stough, C. (2003). Examining the structure of the trait meta-mood scale. *Australian Journal of Psychology, 55*, 154–158.

Ramos-Díaz, N., Fernández-Berrocal, P., & Extremera, N. (2007). Perceived emotional intelligence facilitates cognitive-emotional processes of adaptation to an acute stressor. *Cognition & Emotion, 21*, 758–772.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*, 141–166.

Salovey, P., Bedell, B., Detweiler, J. B., & Mayer, J. D. (1999). Coping intelligently: Emotional intelligence and the coping process. In C. R. Snyder (Ed.), *Coping: The psychology of what works (p. 141–164)*. New York: Oxford University Press.

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. In J. W. Pennebaker (Ed.), *Emotion, disclosure, & health* (pp. 125–154). Washington: American Psychological Association.

Salovey, P., Stroud, L. R., Woolery, A., & Epel, E. S. (2002). Perceived emotional intelligence, stress reactivity, and symptom reports: Further explorations using the Trait Meta-Mood Scale. *Psychology and Health, 17*, 611–627.

Shulman, T., & Hemenover, S. (2006). Is dispositional emotional intelligence synonymous with personality? *Self and Identity, 5*, 147–171.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology, 65*, 467–487.

Thayer, J. F., Rossy, L. A., Ruiz-Padial, E., & Johnson, B. H. (2003). Gender differences in the relationship between emotional regulation and depressive symptoms. *Cognitive Therapy and Research, 27*, 349–364.

Thompson, B., Waltz, J., Croyle, K., & Pepper, A. (2007). Trait meta-mood and affect as predictors of somatic symptoms and life satisfaction. *Personality and Individual Differences, 43*, 1786–1795.

Wong, S. S., Oei, T., Ang, R., Lee, B., Ng, A., & Leng, V. (2007). Personality, meta-mood experience, life satisfaction, and anxiety in Australian versus Singaporean students. *Current Psychology, 26*, 109–120.