Affect and Person Specificity in Mood Regulation

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Master Thesis

Master's Degree Program in Psychology

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May 2007

First and foremost, I would like to thank my supervisor, Pål Kraft, for his guidance, understanding, and optimism throughout this process. I would also like to thank Juanita Muller for her help and encouragement during my period abroad in Australia and for her advice regarding the editing of my thesis. Thank you to all of the participants at the University of Oslo, University of California, Berkeley, and Griffith University, Gold Coast, who took part in the study. Finally, many thanks go to Geir Bakkelund for his unwavering support.

Abstract

489 university students in three countries completed questionnaires in a study investigating affect and person specificity in the use of mood regulation strategies. The major aims of the study were to (1) describe the relationship between specific affective states and the strategies utilised, (2) explore the role that individual differences variables played in the tendency to use particular strategies, and (3) measure the impact that the use of different strategies had upon subjective well-being. Results did not consistently reveal a differential use of strategies based upon the affective state experienced. Gender, culture, degree of neuroticism, extraversion, self-reflection, and insight were all found to impact to some extent upon the type of strategies used. Higher levels of subjective well-being were linked to the use of *cognitive engagement, behavioural engagement,* and *venting and expressing* strategies.

Affect and Person Specificity in Mood Regulation

Mood regulation refers to efforts undertaken to modify or maintain one's mood (Lischetzke & Eid, 2003). The ability to effectively regulate one's mood state is considered to be "a crucial part of effective and adaptive psychological functioning" (Larsen, 2000, p. 129). Indeed, an *inability* to effectively regulate one's affective states has specifically been linked to the development of mental illness (Bradley, 1990) and psychopathology (van Praag, 1990).

Typically, when individuals self-regulate their moods, they aim to either repair negative mood states or to maintain positive ones. Although less common, there are certain situations when the reverse could also be true (see Larsen & Prizmic, 2004, Lischetzke & Eid, 2004). The majority of self-regulatory efforts though are generally aimed at the down-regulation of negative moods (Baumeister, Heatherton, & Tice,1994). Larsen and Prizmic (2004) argue that the regulation of negative affect (NA) is more vital to the regulation of moods because experiences of NA tend to be two to three times stronger than experiences of positive affect (PA). NA, therefore, is given priority in regulatory efforts.

Several models have been proposed to explain the mood regulation process (e.g. Carver & Scheier, 1990; Gross, 1999). Larsen (2000) described a control model of mood regulation based on Carver and Scheier's (1982) cybernetic control model of self-regulation. In this model, Larsen assumes that each individual has a 'set' affective state that they find most appealing and that they constantly monitor their current mood state to check how it compares to their desired state. If they notice that their current mood state is discrepant from their desired mood state, they take active measures to moderate the discrepancy through the use of self-regulation strategies.

Larsen and Prizmic (2004) have further argued that whilst self-regulatory efforts may be focused on the immediate reduction of the discrepancy between current and desired mood states, the overarching goal of mood regulation efforts is to maintain satisfactory levels of subjective well-being (SWB). SWB is considered to be the average levels of positive and negative affect an individual generally experiences (Deiner & Larsen, 1993) and has, therefore, quite a long-term perspective. According to Larsen and Prizmic, in order to regulate SWB, one must regulate, more specifically, one's experiences of PA and NA. In accordance with Larsen's (2000) control model of affect regulation outlined above, individuals will make use of affect regulation strategies in order to do so.

Many studies have been conducted with the aim of developing a complete taxonomy of the self-regulation strategies that individuals use to alter their mood states (see Morris &

Reilly, 1987; Parkinson & Totterdell, 1999; Thayer, Newman & McClain, 1994). Based upon his own empirical studies, Larsen (2000) suggested that all mood regulation strategies were either behavioural or cognitive in nature, and were directed towards altering either the emotion or the situation. Further to his taxonomic work, Larsen and Prizmic (2004) have developed a scale called the Measure of Affect Regulation Styles (MARS). This instrument has been developed to measure the type and the frequency with which individuals make use of the various mood regulation strategies to modify or maintain their mood states. It measures the use of strategies to both down-regulate negative affect and strategies to maintain or up-regulate positive affect.

Negative Affect Regulation Strategies

The strategies used to regulate negative affectivity are more numerous than those used to regulate positive affectivity. Again, this may reflect the relative importance of negative mood regulation over and above that of positive mood regulation. Below is a brief description of the various strategies used to down-regulate negative affect.

Distraction

Distracting oneself from one's bad mood by engaging in an alternate activity is a commonly used strategy to escape a negative mood (Larsen & Prizmic, 2004). Such distracting activities could include watching television, reading a book, working, etc. Several studies have found it to be an effective strategy to use in order to regulate a negative mood (Larsen, 1993, as cited in Larsen & Prizmic, 2004; Nolen-Hoeksema, 1991). Fichman, Koestner, Zuroff, and Gordon's (1999) study also found distraction to be a useful strategy; however, they differentiated between *active* distraction strategies and passive distraction strategies. Active strategies (e.g. reading or working) were found to successfully down-regulate negative moods whilst passive strategies (e.g. watching television) were not found to effectively improve negative mood states (Fichman et. al, 1999). A study by Thayer and colleagues (1994) produced a similar distinction between active and passive distraction strategies.

Larsen and Prizmic (2004) hold that the reason distraction can be a useful mood regulation strategy is that it helps stop individuals from ruminating. Rumination is defined as "the tendency to focus on one's symptoms of distress, and think about the causes and consequences of these symptoms in a passive and repetitive manner" (Nolen-Hoeksema & Corte, 2004, p. 411). As rumination has been shown to prolong episodes of anxiety and

sadness (Nolen-Hoeksema, 2003), to be ineffective in the down-regulation of negative moods (Morrow & Nolen-Hoeksema, 1990), and to predict the development of depression (Nolen-Hoeksema, 2000; Nolen-Hoeksema & Larson, 1999), distraction can be a useful tool to break such ruminative cycles. Given the findings of Fichman et al. (1999) and Thayer et al. (1994), however, it is clearly preferable to utilise strategies that require *active* participation on the part of the individual rather than passive strategies.

Venting or Expressing

Venting or expressing one's negative emotions and feelings in order to confront and move beyond those feelings is a commonly used affect regulation strategy (Larsen & Prizmic, 2004). Baumeister et al. (1994) state that while it is a commonly held view that venting one's feelings is vital in order to decrease the pressure of an emotion or mood (catharsis), studies have shown that expressing negative affect is not always conducive to the down-regulation of negative moods and is, hence, a strategy that is frequently misused. Both Larsen (1993, as cited in Larsen & Prizmic, 2004) and Totterdell and Parkinson (1999) reported that venting was an ineffective strategy to use in the down-regulation of negative affect whilst Fichman and colleagues (1999) found in their study that venting prolonged negative mood states. In the case of anger, researchers have consistently found that venting results in the prolongation of the angry mood (Gondolf, 1985) or in the up-regulation of the negative affect in the form of aggression (Straus, Gelles, & Steinmetz, 1980). Larsen (1993, as cited in Prizmic & Larsen, 2004) reported that expressions of sadness were often associated with increased levels of sadness. Other researchers have shown that emotions are made stronger, not weaker through their expression (emotion expressivity effect) (see Baumeister et al., 1994, for a review of the research). Given the findings discussed above, it appears unlikely that expressing negative affect is an effective strategy to use for the down-regulation of negative moods.

Cognitive Reappraisal

In order to down-regulate negative moods, individuals often try to reinterpret the situation that is causing their mood in order to view it in a more positive light (Larsen & Prizmic, 2004). The old saying 'looking on the bright side' describes this strategy quite adequately. By refocusing one's attention on the positive aspects of a situation and deemphasising the negative, one can alleviate a negative mood. Several studies have found cognitive reappraisal to be an effective mood regulation strategy (Larsen, 1993, as cited in Larsen & Prizmic, 2004;

Totterdell & Parkinson, 1999). Davis, Nolen-Hoeksema, and Larson (1998) have reported that there are also long-term benefits to being able to find something positive in a predominantly negative situation. In their study, they found that following the death of a loved one, those individuals who were able to find something positive in the sorrowful experience were not as unhappy six months later as those who could not.

Suppression

The suppression of negative affect is a negative mood regulation strategy whereby individuals avoid expressing their negative moods in order to alleviate them (Larsen & Prizmic, 2004). Whilst suppression can effectively stop one from experiencing negative feelings such as disappointment and anger (Gross, 1998), the effects of using such a strategy may not be so positive when used over longer periods of time. For example, Gross and John (2003) reported that the suppression of emotional expression was related to lower levels of well-being and interpersonal functioning.

Downward Social Comparison

A perhaps less widely utilised strategy, downward social comparison involves attempting to improve negative mood states by comparing oneself to others who have experienced something worse (Larsen & Prizmic, 2004). In doing so, individuals can feel that, in relation to these certain others, their situation is relatively tolerable. Research has shown, however, that for this strategy to be effective individuals need to compare themselves to others who are similar to themselves and who are equally vulnerable to the same outcomes (Lockwood, 2002).

Taking Action or Making Plans

In an effort to alleviate their negative mood states, some individuals take action to solve the problem causing their mood (Larsen & Prizmic, 2004). Termed 'problem-focused coping' in the coping literature, this strategy has been shown to be an effective strategy in the reduction of stress, especially when compared to the alternative 'emotion-focused coping' (Lazarus, 1966). In addition, it has been reported that making plans to avoid similar problems in the future (when taking action would not alter an outcome) is also an effective and frequently used strategy to improve negative moods (Larsen & Prizmic, 2004).

Pleasant Activities and Self-Reward

Individuals often reward themselves by engaging in pleasant activities that make them feel good or by treating themselves to something they may desire when attempting to down-regulate a negative mood (Larsen & Prizmic, 2004). Fichman and colleagues (1999) found that rewarding oneself with pleasant activities was a very effective negative mood regulation strategy, while Faber and Vohs (2004) argue that self-gifting (or buying gifts for oneself) can effectively decrease NA or increase PA.

Exercising

Exercising is a well-established mood regulation strategy (Larsen & Prizmic, 2004). Steptoe, Kimball and Basford (1998) found that women reported less negative moods and more positive moods on the days that they had exercised, whilst Arent, Landers and Etnier (2000) reported in their meta-analysis of 32 studies that exercising was associated with lower levels of negative moods and higher levels of positive moods in elderly people. A recent study by Giacobbi, Hausenblas, and Frye (2005) also found that exercising was associated with the reduction up-regulation of positive moods and the down-regulation of negative moods, although the relationship between exercise and negative mood reduction was not significant when daily life events were controlled for. Watson (2000), however, disagrees and holds that the evidence for an association between the exercise and mood improvement is mixed in non-clinical populations. Nevertheless, it is a frequently used mood regulation strategy. A study conducted by Thayer and colleagues (1994), revealed that participants believed exercise to be the best way to improve negative mood states.

Consumptive Behaviours

Some individuals attempt to improve their negative moods by eating food, whilst others use stimulants such as caffeine or nicotine. Still others may drink alcohol or even ingest drugs to escape their negative moods (Larsen & Prizmic, 2004). Whilst the majority of these behaviours may have a short-term effect as they either distract individuals from their negative moods temporarily or satisfy a craving, the long-term effects of using such strategies to regulate one's mood are unlikely to be beneficial. Studies by Fichman and colleagues (1999) and Larsen (1993) found that passive distraction strategies such as eating were not useful in the down-regulation of negative affect. Indeed, an over reliance on either food, alcohol, cigarettes, or narcotics to improve mood states will, in all probability, only have negative consequences for the health of an individual.

Socialising

A very common strategy implemented to down-regulate negative affect is to spend time with others (Larsen & Prizmic, 2004). The participants in Thayer and colleague's (1994) study reported that social interaction was an effective strategy to use in the down-regulation of negative affect. Tice and Baumeister (1993) clarify, however, that it is important when one socialises to improve a negative mood state that one does not choose to be with others who are also experiencing negative moods. Larsen and Prizmic suggest that socialising is a useful technique for several reasons. The activity is a form of distraction in itself (typically a positive one) and thus helps to avoid ruminative tendencies. Alternatively, this strategy allows individuals the chance to share their feelings with others, which, in turn, provides opportunities for them to alter the way they are thinking about their problem through engaging in the cognitive reappraisal process.

Withdrawal

Withdrawal involves being alone and avoiding contact with others whilst one is experiencing a negative mood state (Larsen & Prizmic, 2004). Although this has been shown to be a commonly used strategy (Larsen, 1993, as cited in Larsen & Prizmic, 2004; Morris & Reilly, 1987; Parkinson et al., 1996), Larsen and Fichman et al. (1999) found that withdrawal did not alleviate negative mood states. Thayer and colleagues (1994) also found avoidance to be a less than effective strategy to use in the down-regulation of negative affect. Larsen and Prizmic do acknowledge that withdrawal is likely to be an appropriate strategy to use when experiencing angry moods, however it will be an ineffective strategy to use when experiencing other negative states (e.g. loneliness, worry, sadness).

Positive Affect Regulation Strategies

Although there are substantially fewer strategies used to regulate positive affect, an unpublished study by Prizmic (1997, as cited in Larsen & Prizmic, 2004) revealed that 91% of respondents indicated that they had consciously used regulation strategies in order to provoke a good mood or to maintain a positive affective state. Clearly, these strategies are also very important to mood regulatory efforts and are outlined below.

Positive Focus

As opposed to cognitive reappraisal (which, as previously discussed, involves reinterpreting the way one views negative events or situations causing bad moods),

maintaining a positive focus requires one to focus on the positive aspects in one's life (Larsen & Prizmic, 2004). Here the saying 'to count one's blessings' is an apt descriptor. Emmons and McCullough (2003) randomly assigned participants to complete daily lists of either complaints, things that they were grateful for, or neutral things for either 3 or 10 weeks. They found that across the majority of well-being measures, those individuals who had kept lists of things they were thankful for had higher levels of well-being. Feeling gratitude and maintaining a positive focus appear, therefore, to be important tools for the up-regulation of positive affect.

Helping and Performing Other Acts of Kindness

Performing altruistic behaviours is another mood regulation strategy that can be used to increase feelings of PA (Larsen & Prizmic, 2004). There have been few studies, however, that have directly addressed whether helping is associated with increases in PA. Salovey, Mayer, and Rosenhan (1991) argue that it is inevitable that helping would promote positive moods. Indirect evidence for the usefulness of helping as an affective regulation strategy has been found. For example, in Lucas' unpublished study (2000, as cited in Larsen & Prizmic, 2004), it was found that the frequency of helping behaviour was positively correlated with subjective well-being. Performing altruistic behaviours, therefore, appears to have both short and long-term benefits.

Expressing Positive Feelings

Laughing, smiling and using humour are strategies that can be used in the maintenance or up-regulation of positive affect (Larsen & Prizmic, 2004). As previously stated, researchers have claimed that mood can be controlled through actual emotional expression or the emotional expressivity effect (see Baumeister et al., 1994, for a review of the research). Duclos and Laird (2001) argue, therefore, that expressions of positive affect could increase or maintain positive mood states. Studies on the topic have tended to focus on the use of humour and its relationship to coping with stress, and these have shown a positive relationship between the use of humour and one's ability to deal effectively with stress (Bonanno & Keltner, 1997; Kuiper & Martin, 1998). In addition, Lefcourt (2002) presented data that suggested that people with a sense of humour often had good immune systems and were able to recover from illness more quickly than those without a sense of humour.

Affect and Person Specificity in Mood Regulation

The aim of the present study is to further our understanding of mood regulation through the focus on affect specificity and person specificity in strategy usage. Affect specificity, is concerned with the identification of possible mood-related differences in the choice of strategies; that is, can we expect that individuals will show a tendency to choose different strategies depending on the particular mood state they are experiencing? This study will attempt to shed light on this issue by exploring which strategies individuals report using most frequently when feeling bored, lonely, worried, anxious, sad, and angry. To the best knowledge of the author, there has not been any research conducted with this specific focus before, and, therefore, this research is purely exploratory. It is hypothesised, however, that the mood regulation strategies identified as most commonly used will vary according to the specific mood state experienced by the individual.

Person specificity, alternatively, is concerned with the identification of the individual difference variables that affect the use of the various mood regulation strategies. Below, some of these potential individual difference variables are discussed.

Gender

Studies of clinical populations have shown that women are more likely to experience depression that men. Indeed, Nolen-Hoeksema (1990) found that in their sample, women were twice as likely as men to become depressed. This finding is rather contradictory to studies conducted in non-clinical populations that have found that men and women do not differ significantly in terms of well-being and happiness (see Watson, 2000, for a review). For example, Michalos (1991) conducted a large study of citizens from 39 countries around the world and found that women and men reported very similar levels of well-being and happiness. If it is concluded then that men and women in the non-clinical population experience more or less equivalent levels of PA and NA, can it be assumed that men and women use similar strategies to regulate their moods? The research discussed below suggests that this may not be the case.

Raver's (1996) study of self-regulatory abilities in toddlers found that boys and girls used divergent activities to regulate affect. Raver found that boys used distraction most frequently whilst girls were more likely to prefer to be consoled by their mothers. Thayer et al. (1994) found clear gender differences in the use of mood regulation strategies by adults. In their study, women were found to use what they termed "passive mood management strategies" (p. 922). This broad category included watching TV, eating, sleeping, and drinking caffeine. A

second broad category of strategy commonly endorsed by females was that of "social support, ventilation, and gratification" (p. 922) which included strategies such as talking with others, eating, smoking, and engaging in an emotional activity. Men, alternatively, more frequently endorsed the use of distraction and seeking out pleasant activities to alter their mood states. In addition, the use of alcohol and drugs was a strategy more commonly selected by males.

Other evidence of gender-based differences in the use of mood regulation strategies comes from specific studies on eating, alcohol usage, and on rumination. For example, Tice and Baumeister (1993) found that women were more likely to eat food in order to alleviate sad mood states than men. With regards to alcohol use, male social drinkers have been found to make greater use of alcohol in order to regulate negative moods than female social drinkers. Interestingly, the reverse pattern seems to hold true amongst those who have been diagnosed with Alcohol Use Disorder (AUD); that is women who have been diagnosed with AUD use alcohol to regulate their moods more than men diagnosed with a similar diagnosis (see Nolen-Hoeksema & Corte (2004) for a review of relevant literature on gender differences in alcohol usage). When ruminative tendencies are considered, women show a proneness to ruminate more than men. In a study by Butler and Nolen-Hoeksema (1994), women who had been induced into a sad mood were more likely than men in an induced-sad mood to choose to focus on their negative feelings than to engage in an alternative, distracting task. Surprisingly, the result also held when a neutral mood was induced. The research suggests, therefore, that men and women do make differential use of mood regulation strategies. The current study will extend the previous findings by providing a current assessment of the most frequently endorsed strategies amongst men and women.

Culture

An additional variable of interest in this study of person specificity in mood regulation is that of culture. Do the strategies most frequently utilised by people in the various parts of the world differ? And if so, can we posit that these differences arise as a result of socialisation practices and cultural norms? Some theorists (e.g. Larsen & Prizmic, 2004) have hypothesised the possibility of an individualistic versus a collectivist cultural distinction in the use of strategies. In fact, a cross-cultural study of strategy use, with a particular focus on consumptive behaviours, found that individualistic cultures use more consumptive strategies and choose strategies that have a greater emotional impact on the individual (as opposed to the group) than collectivist cultures (Luomala, Kumar, Worm, & Singh, 2004).

In this study, we are interested in an intra-individualistic cultural comparison: Americans versus Norwegians versus Australians. Can we reasonably expect to find that individuals in the United States of America will show differing patterns of mood regulation strategy usage when compared to individuals from Norway and Australia? Although there is clearly a lack of research evidence, this expectation is still considered reasonable. Whilst each of these countries scores high on Individualism scales (Hofstede, 1991), each also has different sets of cultural norms and values which could potentially have an effect on the way individuals regulate their moods. On this basis, it is hypothesised that differences will emerge in the typical responses endorsed in the different countries in this study.

Extraversion and Neuroticism

Of the Big 5 personality traits (Costa & McCrae, 1992), two have been consistently identified as important predictors of mood and emotionality: neuroticism and extraversion. Individuals high in neuroticism tend to feel anxious, sad, shameful, unfriendly, and guilty, whilst those high in extraversion, conversely, tend to be sociable, assertive, positive, lively, and friendly (Watson, 2000). Given these tendencies, it is not surprising that many studies have found a strong association between neuroticism and NA and extraversion and PA; that is, individuals who score high on neuroticism scales tend to exhibit high levels of NA, and individuals who score high on extraversion scales tend to exhibit high levels of PA (see Watson, 2000, p.180-2, for a review of the research). Furthermore, these studies have shown that NA and PA are not opposite ends of a single dimension, but two separate and uncorrelated dimensions. Scores on one dimension do not, therefore, impact the scores on the other.

Based on this research, it is concluded that neuroticism and extraversion differentially impact upon the affective lives of individuals. This study will extend current research and hypothesise that these personality traits have a direct effect, not only on the experience of specific mood states, but also on the choice of strategies chosen to regulate those mood states. The specific nature of these differences can only be speculated, although Larsen and Prizmic (2004) have suggested that extraverts could possibly make greater use of strategies such as socialising or helping, whilst neurotics may be more likely to use ineffective strategies. Clearly, one major aim of this study is to identify what, if any, effect these personality traits have upon strategy choice.

Private Self-Consciousness

Private self-consciousness (PSC) is yet another individual differences variable that may have an effect on mood regulation. Lischetzke and Eid (2003), who define PSC as "dispositional self-focused attention to one's inner self" (p. 361), highlight the importance of PSC to the self-regulatory process. Consider the control model of affect regulation proposed by Larsen (2000). As previously mentioned, in this model individuals need to compare their current affective state with their desired affective state in order to ascertain whether it is necessary to take action to modify their mood. Clearly, one must have an awareness of one's current mood state in order to make this comparison and this awareness comes through attention.

Many studies have been conducted to ascertain whether heightened levels of PSC are, in fact, generally related to positive outcomes. The findings, however, have been quite contradictory. For example, some studies have found that PSC is associated with such positive outcomes as greater self-knowledge (Mullen & Suls, 1982) and more successful self-regulation (Suls & Fletcher, 1985) whilst others have indicated that PSC is related to negative outcomes such as depression and negative affect (Ingram, 1990). Grant, Franklin, and Langford (2002) separate what has been commonly called PSC in the literature into two sub-components: self-reflection, or "the inspection and evaluation of one's thoughts, feelings, and behaviour" (p. 821) and insight or "the clarity of understanding of one's thoughts, feelings, and behaviour" (p. 821). In their study, they found that insight was negatively correlated with depression, anxiety, stress, and alexithymia, and positively correlated with self-regulation and cognitive flexibility whilst self-reflection was positively correlated with anxiety and stress (but not depression and alexithymia). Based on the findings of Grant and colleagues, it appears that having a clear *understanding* of one's affective states (insight) will lead to more positive outcomes than merely having an awareness of the *experience* of one's varying affective states (self-reflection).

In this study, PSC will be measured as a variable that may potentially impact upon the choice and frequency of strategy use in mood regulation. To the author's knowledge, there have been no studies that have specifically looked at the relationship between PSC and the strategies used to regulate mood states. Based on the research of Grant and colleagues (2002) linking insight to positive outcomes, it is hypothesised that those high in insight will make the greatest use of the more effective mood regulation strategies, such as cognitive reappraisal, making plans and taking action, and that those low in insight may make greater use of ineffective strategies, such as rumination or venting. These hypotheses are broadly based on

the reasoning that those high in insight have a clear understanding of their own affective states, and should, therefore, utilise more effective strategies in order to regulate their mood states than those low in insight who lack this understanding. In accordance with prior research on the relationship between self-reflection and negative outcomes (Grant et al., 2002), it is further hypothesised that self-reflection will be associated with the use of ineffective strategies such as rumination and withdrawal.

<u>Subjective Well-Being</u>

In addition to this study's focus on the choice and frequency of strategy usage in mood regulation, another question will be addressed: Are there any long-term effects associated with the use of mood regulation strategies on one's affective well-being? Several previous studies have attempted to uncover which affect regulation strategies are most effective for improving mood states (e.g. Parkinson & Totterdell, 1999; Prizmic 2000 as cited in Larsen & Prizmic, 2004), however, these have tended to focus on the immediate effectiveness of the strategies employed. For example, in Prizmic's daily experience study, participants recorded their mood and use of strategies on several occasions during the course of the day for several weeks at a time. The researchers later computed whether the participant's mood following the use of a strategy was better than it would have been by chance. Another strategy used to gauge effectiveness has been to ask the participants themselves to recollect how effective the strategy is at improving their mood states (Thayer et al., 1994).

While such research has certainly been useful for gaining insight into the short-term effectiveness of the various affect regulation strategies, we are not able to see any of the potentially long term effects through such studies. For example, while it has been established that there are some strategies that will stop one temporarily from experiencing a negative mood (e.g. suppression of unwanted thoughts), the effects may not be so positive when those same strategies are used over longer periods of time (Labott et al, 1990). Daily experience studies, therefore, do not reveal anything of the long-term relationship between the choice and frequency of strategy use and an individual's affective well-being at the most general level and, for this reason, it is suggested that a broader perspective needs to be adopted.

To address this imbalance in the literature, this study will explore the relationship between the use of different mood regulation strategies and subjective well-being. As discussed, subjective well-being is the average of the levels of positive and negative affect that an individual experiences, and is considered to be the over-arching goal of mood regulatory efforts (Larsen & Prizmic, 2004). Because people must regulate their experiences

of positive and negative affect in order to regulate their feelings of subjective well being, and they tend to make use of affect regulation strategies in order to do so, it makes intuitive sense to study these variables in combination.

Measure of Affect Regulation Styles (MARS)

As already mentioned, the MARS was developed by Larsen and Prizmic (2004) to measure how frequently an individual reports using the various mood regulation strategies in order to either down-regulate a negative mood or to maintain a positive mood. Larsen and Prizmic have found that the 34 items of the MARS form seven indices: *active distraction, cognitive engagement, behavioral engagement, venting and expressing affect, passive distraction and acceptance, rumination and withdrawal,* and *waiting and reframing.*

The *active distraction* index contains the following strategies: (i) I socialize, (ii) I do something fun, something I really enjoy, (iii) I watch TV, read a book, listen to music, (iv) I use alcohol, (v) I laugh, joke around, try to make myself or others laugh, (vi) I treat myself to something special, (vii) I play sports, exercise, and (viii) I think about something to distract myself from my feelings. The strategies subsumed by this index (with the exception of 'I use alcohol') have been frequently found to be effective mood regulators (Faber & Vohs, 2004; Fichman, et al., 1999; Giacobbi, et al., 2005; Larsen, 1993, as cited in Larsen & Prizmic, 2004; Nolen-Hoeksema, 1991; Thayer et al., 1994). It is, therefore, presumed that higher mean scores on this index will be associated with higher scores on the positive well-being measures.

The strategies that form the *cognitive engagement* index of the MARS are: (i) I try to think about those things that are going well for me, (ii) I try to be grateful for the things in my life that are going well, (iii) I try to put things into perspective, (iv) I try to find something good in the situation, and (v) I compare myself to people who are worse off. Again, because prior research (Larsen, 1993, as cited in Larsen & Prizmic, 2004; Thayer et al., 1994; Totterdell & Parkinson, 1999) has found that these are generally effective strategies to use in order to regulate one's mood, it is presumed that higher scores on this index will also be positively associated with well-being outcomes.

Likewise, because previous studies have linked the strategies subsumed by the *behavioural engagement* index with improvements in mood (e.g. Fichman et al., 1999; Larsen, 1993, as cited in Larsen & Prizmic, 2004; Lucas, 2000, as cited in Larsen & Prizmic, 2004), frequent use of these strategies should also be linked to positive well-being outcomes. The strategies reflected in this index are: (i) I make plans or resolution to avoid such problems

in future, (ii) I work on something or stay busy, (iii) I take action to solve the problem, and (iv) I go out of my way to help someone.

Conversely, it is expected that negative well-being outcomes will be associated with a tendency to use the strategies subsumed by the *passive distraction and acceptance* index. This index reflects the following strategies: (i) I pray, put my faith in God, or do something religious, (ii) I try to accept it as my fate, what will be will be, (iii) I drink coffee or caffeinated beverages, and (iv) I eat something. Most of these strategies have been routinely found in research to be ineffective as mood regulators (Fichman et al., 1999; Larsen, 1993, as cited in Larsen & Prizmic, 2004; Thayer, et al., 1994). Similarly, the *rumination and withdrawal* index subsumes strategies that have frequently been found by researchers to prolong or increase negative moods (Fichman, et al.,1999; Larsen, 1993, as cited in Larsen & Prizmic, 2004; Morrow & Nolen-Hoeksema, 1990) and, therefore, higher scores on this index are expected to be associated with negative well-being outcomes. The specific strategies subsumed by this index are: (i) I write about my feeling in diary, (ii) I withdraw from or avoid the situation, (iii) I sleep or take a nap, and (iv) I try to understand my feelings by thinking and analyzing them.

The *waiting and reframing* index contains only two strategies: (i) I try to reinterpret the situation, to find different meaning, and (ii) I daydream of the time when I will not have this problem. It is difficult to predict whether the scores on this index will have any bearing on well-being outcomes as the first strategy appears to be a strategy that could be effective in regulating a negative mood, whilst the second appears to be relatively passive and would, therefore, be unlikely to be an effective mood regulator.

Finally, given the weight of the arguments presented in the literature against the venting of negative affect (Fichman et al, 1999; Larsen,1993; Totterdell & Parkinson,1999), it is hypothesized that higher scores on this index will be associated with lower levels of well-being. The strategies reflected in this index include: (i) I let my feelings out by expressing them, (ii) I try to not let my feeling show, to suppress any expression. (reversed item), (iii) I talk to someone or my friend about my feelings, (iv) I keep for myself, I want to be alone. (reversed item), and (v) I talk to an advisor/mentor or older person who could give me advice.

Unique contribution of present study - hypotheses

Prior research conducted in the field of mood regulation and, more specifically, on mood regulation strategies has focused predominantly on (1) the development of a complete taxonomy of the various strategies individuals use in order to regulate their mood (Morris &

Reilly, 1987; Parkinson & Totterdell, 1999; Thayer, et al., 1994), (2) the development of models to describe the processes involved in affect regulation (e.g. Carver & Scheier, 1990; Gross, 1999; Larsen, 2000), and (3) the identification of the strategies which appear to most effectively improve mood states (Larsen, 1993, as cited in Larsen & Prizmic, 2004; Parkinson & Totterdell, 1999; Prizmic, 2000 as cited in Larsen & Prizmic, 2004; Thayer, et al., 1994). The present study, alternatively, is concerned principally with the issues of affect and person specificity in the use of mood regulation strategies, and the relationship between strategy usage and subjective well-being. Although there is a degree of overlap between previous research and this study, the author knows of no other study that has specifically explored the role of affect specificity in either strategy usage or the relationship between such a multitude of individual differences variables and the use of mood regulation strategies.

This study will specifically extend the previous findings on gender differences in strategy usage by providing a current assessment of the most frequently endorsed strategies amongst men and women. It will investigate intra-individualistic cultural distinctions in strategy use, and will extend current research on mood and personality by proposing personality-based differences in the choice of strategies chosen to regulate mood states. Additionally, this study will explore the relationship between private self-consciousness and the strategies used to regulate mood states, something that has not previously been addressed in research. Furthermore, the emphasis placed here upon SWB as an outcome variable of strategy usage separates this study from prior research that has focused predominantly on the short-term effectiveness of the various affect regulation strategies. Figure 1 clearly illustrates the variables under investigation in the present study of person specificity in affect regulation.

The present study makes a number of hypotheses regarding these issues that are summarised below:

1. Individuals will differentially use mood regulation strategies depending upon the mood state they are experiencing; for example, individuals will use a different strategy to regulate their angry moods than they will use to regulate their sad moods etc.

2. Men and women will differentially use mood regulation strategies. It is expected that men will make greater use of distraction strategies such as exercise and alcohol consumption than women in order to regulate their moods, whilst women will be more inclined than men to socialise, vent, and to eat in order to alter their mood states.

3. Americans, Norwegians, and Australians will report different patterns of strategy choice and frequency of usage.

4. Extraverts will be more likely to choose more socially-oriented strategies than introverts who will be more likely to use asocial strategies such as withdrawal.

5. Neurotics will frequently use ineffective strategies such as ruminating, eating, and drinking alcohol to improve their mood states. Emotionally stable individuals will more frequently use effective strategies such as cognitive reappraisal and distraction than neurotics.

6. Individuals high in insight will use more effective strategies than those low in insight. Those high in self-reflection, but low in insight, will report the use of ineffective strategies.

7. The use of strategies subsumed by the MARS indices *active distraction, cognitive engagement,* and *behavioral engagement,* will be associated with increased levels of PA and SWB. Conversely, the use of strategies subsumed by the indices *passive distraction and acceptance, rumination and withdrawal, and venting and expressing affect* will be associated with higher levels of NA and lower levels of SWB. W*aiting and reframing* will be unrelated to well being.

Method

Participants

Table 1 describes the participants by culture, gender, and age. Four hundred and eighty-nine students from three universities in three continents (140 men and 349 women), ranging in age from 17 to 65 ($M = 22.57$), participated in the present study. In the United States, the 210 participants (65 men and 146 women) were all undergraduate students in psychology at the University of California, Berkley Campus, who participated in the study in exchange for course credit. The age of the American participants ranged from 18 to 34 ($M = 19.91$ years). In Norway, the 193 participants (54 men and 139 women) were psychology undergraduate students at the University of Oslo whose age ranged from 19 to 65 ($M = 23.62$). The Norwegian students received no reward for participation in the study. In Australia, of the 85 participants recruited (21 men and 64 women), ranging in age from 17 to 50 ($M = 26.75$), almost 60% were undergraduate psychology students in psychology at Griffith University, Gold Coast Campus, who participated in the study in exchange for course credit. Approximately 35% of the participants were higher level psychology students from the same university who did not receive a reward for their participation, whilst the remaining 5% were undergraduate students who received a coffee voucher valued at US$2 in exchange for their participation.

Materials

Participants completed a questionnaire booklet. In Norway, the questionnaire was distributed in Norwegian. To ensure the meanings of the various scales were retained, the back-translation method was used to translate any scale that had not previously been translated from English into Norwegian. This process involved native Norwegian speakers translating the English scales into Norwegian, and then having the scales translated back into English. The original scales and the back-translated scales were then compared to reveal any inconsistencies. If necessary, adjustments were made to the Norwegian scales in order to address these inconsistencies.

Demographic Information

Age and gender were established through two items which asked the respondent to indicate their age and gender respectively, whilst culture was based upon which country the data was collected in: Norway, USA, or Australia

Self-Report Measures

Affect specificity was assessed through constructed questions which asked the participants to indicate which one strategy they were *most likely* to use when experiencing a variety of different affective states, for example, when feeling bored, lonely, worried etc. Participants chose the particular strategy from a list of 13 broad groups of strategies. These groupings were based on Larsen and Prizmic's (2004) discussion of mood regulation strategies and can be found in Appendix 1.

The new 34 item Measure of Affect Regulation Styles (MARS; Larsen & Prizmic, 2004) was used to assess which affect regulation strategies were most frequently endorsed by participants. Participants rated on a scale ranging from 0 (*not at all*) to 6 (*almost always*) how frequently they generally used each of the given strategies to modify their feeling states. Example MARS items are "I take action to solve the problem causing my mood" and "I keep to myself, I want to be alone". As discussed, Larsen and Prizmic (2004) report that the MARS has seven factors: *active distraction, cognitive engagement to manage the affect, behavioural engagement to mange the affect, venting and expressing the affect, passive distraction and acceptance, rumination and withdrawal,* and *waiting and reframing.* As these are formative indices and a high degree of internal consistency is, therefore, not assumed, alpha coefficients were not calculated.

To assess trait levels of extraversion and neuroticism, the extraversion and neuroticism sub-scales of The Big Five Inventory (BFI; John & Srivastava, 1991) were used. The BFI is a widely used measure of broad personality traits that has been demonstrated to have good convergent and divergent validity (John & Srivastava, 1991). Each sub-scale contains eight items and participants rated the extent to which they agreed that each item was an apt descriptor of their own personality. Higher numbers corresponded to higher levels of agreement. Example items from the extraversion subscale include "I see myself as someone who is talkative" and "I see myself as someone who is outgoing, sociable". Example items from the neuroticism subscale include "I see myself as someone who is depressed, blue" and "I see myself as someone who can be moody". John and Srivastava (1991) report reliability coefficients of .88 and .84 for the extraversion and neuroticism subscales of the BFI respectively. In the present study, coefficients were calculated to be .85 and .83.

Private self-consciousness was assessed using the newly developed Self Reflection and Insight Scale (SRIS; Grant, Franklin, & Langford, 2002). This scale contains 20 items, ten of which measure self-reflection (SRIS-SR) and the other ten, insight (SRIS-IN). Participants rated the extent to which they agreed with the statements on a scale from 1 to 6, with higher numbers corresponding to higher levels of agreement. Example self-reflection items include "I frequently examine my feelings" and "It is important for me to evaluate the things that I do". Example insight items include "I usually have a clear idea about why I've behaved in a certain way" and "Often I find it difficult to make sense of the way I feel about things". Although this is a new scale and has not been used extensively in research, it does appear to be a reliable instrument. Grant, Franklin and Langford reported alpha coefficients of .91 and .87 for the self-reflection and insight scales respectively, whilst alpha coefficients of .91 and .77 were calculated in the present study.

The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was used to assess depressive severity. This scale does not assess clinical depression, but rather measures depressed mood. The CES-D contains 20 items and participants indicated how often *during the past week* they had felt or have behaved in certain ways on a scale ranging from "0 - rarely or none of the time (less than 1 day)" to "3 - most or all of the time (5-7 days)". Example items include "I was bothered by things that usually don't bother me" and I was happy". A total score is derived by summing the responses, with higher scores indicating a higher level of severity. The CES-D has been studied extensively and has been found to be reliable (Radloff, 1991; Roberts & Vernon, 1983; Santor & Coyne, 1997) and valid (e.g.

Himmelfarb & Murrell, 1983). The present study calculated an internal reliability coefficient of .89.

Affect was assessed using the Positive and Negative Affect Schedule (PANAS; Watson,Clark, & Tellegen, 1988). The PANAS is a 20 item scale which measures trait levels of positive affect and negative affect. Participants rated the degree to which each of 20 adjectives (10 positive and 10 negative) described them *on average* on a 5 point scale ranging from *very slightly or not at all* to *extremely*. This is a well-established and reliable measure of affect (Watson et al, 1988). Watson and colleagues (1988) report Cronbach alphas of .88 and .87 for positive and negative affect respectively. In the present study, alphas of .84 and .85 were calculated.

Subjective well-being was assessed using the brief, five item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Participants rated the extent to which they agreed with the statements on a likert-type scale from 1 to 7 with higher numbers corresponding to higher levels of agreement. Example items include "In most ways my life is close to my ideal" and "If I could live my life over, I would change almost nothing". The psychometric properties of this scale have been repeatedly studied and it has been show to be a valid and reliable measure of well-being (Pavot & Diener, 1993; Diener et al., 1985). Pavot and Diener report an alpha coefficient of .87 whilst, in the present study, an alpha of .86 was calculated.

Procedure

Participants were asked to carefully read and to sign a consent form. This consent form assured them of their right to withdraw from the study at any time and also of the confidentiality of their responses. They were specifically instructed not to write their names anywhere on the questionnaire itself to ensure anonymity. Having provided informed consent, the participants completed the questionnaire booklet. The questionnaire took 25 minutes on average to complete. Consent forms and questionnaire booklets were stored separately to ensure the anonymity of the participants. In Australia and the United States, it was necessary to apply to the Ethics Committees at both Griffith University and at the University of California prior to carrying out this study, however, no such permission was sought in Norway.

Results

Affect specificity

Table 2 describes the *one* strategy (chosen from thirteen broad strategy groupings) that participants indicated was the strategy that they *usually* use when experiencing each of five negative mood states (*lonely, sad, bored, worried, anxious,* and *sad*). Several clear tendencies were found.   Both genders reported that they most often employ *distraction* strategies when bored and tend to *socialise* when lonely. When feeling worried, anxious, sad, and angry, participants reported that they most often use *talking* to improve their moods. In several instances, however, women and men reported differential use of the same strategy. Specifically, when experiencing a sad mood , both women and men reported *talking* as their most frequently used strategy, however, a higher percentage of the females were found to do so than the males ($\chi^2(1, N = 487) = 11.03, p > .001$) . A similar result was found for angry mood states ($\chi^2(1, N = 486) = 10.20, p > .001$). In other instances, the most frequently used strategies by women and men were completely different. Specifically, when feeling either worried or anxious, women reported *talking* as the most frequently used mood regulation strategy whilst men, in both cases, reported that they most frequently *do something active* in order to regulate their moods.

Person Specificity

Frequencies

As shown in Table 3, across the entire sample, the most frequently endorsed MARS indices were: *Cognitive engagement* ($M = 3.77, SD = .98$), *Behavioural engagement* ($M = 3.35, SD = .80$), and *Venting and expressing affect* ($M = 3.22, SD = .93$). The least frequently endorsed MARS index was: *Passive distraction and acceptance* ($M = 2.17, SD = 1.08$).

In terms of specific strategies, the most frequently endorsed mood regulation strategies, i.e. those strategies whose mean total scores were 4 (*often*) or more, were: *I try to be grateful for the things in my life that are going well* ($M = 4.43, SD = 1.32$), *I try to understand my feelings by thinking and analysing them* ($M = 4.23, SD = 1.36$), *I try to put things into perspective* ($M = 4.07, SD = 1.16$), and *I talk to someone or my friend about my feelings* ($M = 4.06, SD = 1.53$). The least frequently endorsed strategies, i.e. those strategies whose mean total scores were 2 (*hardly ever*) or less, were: *I use alcohol* ($M = 1.09, SD = 1.29$), *I talk to an advisor or mentor* ($M = 1.14, SD = 1.46$), *I pray, put my faith in God, or do something religious* ($M = 1.65, SD = 1.93$).

Mood regulation strategies across gender and culture

The mean scores on the MARS indices were compared by gender (refer to Table 3). Significant differences were revealed between the males and females on five of the seven indices: a*ctive distraction, t* (487) = 2.60, p < .01, *venting and expressing affect*, *t*(487) = 6.63, p < .001, *passive distraction and acceptance*, *t*(487) = 3.75, p < .001, *rumination and withdrawal*, *t*(487) = 5.10, p < .001, and *waiting and reframing*, *t*(487) = 2.58, p < .01. In each case, women were found to make significantly greater use of the mood regulation strategies subsumed by that index than men.

Strategy specific gender differences are also reported in Table 3. Women were significantly more likely than men to use the following strategies to regulate their moods: *I socialise, t*(487) = 4.48, p < .001, *I treat myself to something special, t*(487) = 4.12, p < .001, *I send text messages (SMS) to friends and family, t*(487) = 4.82, p < .001, *I let my feelings out by expressing them, t*(487) = 6.40, p < .001, *I talk to someone about my feelings, t*(487) = 7.66, < .001, *I eat something, t*(487) = 4.92, p < .001, and *I write about my feelings in a diary*, t(487) = 6.25, p < .001. Conversely, men were found to make significantly greater use of the following strategies than women to regulate their moods: *I try not to let my feelings show, to suppress any expression, t* (487) = 2.98, p < .01, and *I keep for myself, I want to be alone*, t(487) = 3.17, p < .01.

The mean scores on the MARS indices were compared cross culturally (see Table 4). Significant differences were revealed between the three cultures on five of the seven indices: *cognitive engagement to manage the affect*, *F*(2,486) = 6.95, p < .001, *venting and expressing affect*, *F*(2,486) = 6.34, p < .01, *passive distraction and acceptance*, *F*(2,486) = 6.26, p < .01, *rumination and withdrawal*, *F*(2,486) = 27.42, p < .001, and *waiting and reframing*, *F* (2,486) = 23.72, p < .001.

Post hoc tests were conducted to uncover where the specific differences between cultures lay. Hochberg testing revealed that Americans (*M* = 3.58, *SD* = 1.14) reported less use of the strategies subsumed by the index *cognitive engagement to manage the affect* than Norwegians, (*M* = 3.91, *SD* = .75), p < .01, or Australians, (*M* = 3.92, *SD* = .95), p < .05.

Australians (*M* = 3.51, *SD* = .86) reported greater use of the strategies subsumed by the index *venting and expressing affect* than Norwegians, (*M* = 3.18, *SD* = .85), p < .05, and Americans, (*M* = 3.13, *SD* = 1.01), p < .01.

It was found that Americans (*M* = 2.34, *SD* = 1.01) were more likely to use the strategies subsumed by the index *passive distraction and acceptance* than Norwegians, (*M* = 1.97, *SD* = 1.11), p < .001. Strategy specific post hoc tests further revealed that Norwegians (*M* = 1.62,

SD = 1.35) were significantly less likely to use the strategy *I eat something* to regulate their moods than Australians, (*M* = 2.40, *SD* = 1.63), p < .001, or Americans, (*M* = 2.59, *SD* = 1.58), p < .001. Additionally, Norwegians (*M* = 1.22, *SD* = 1.70) were less likely to employ the strategy *I pray, put my faith in God, or do something religious* than Australians, (*M* = 1.87, *SD* = 2.07), p < .05, or Americans, (*M* = 1.96, *SD* = 2.00), p < .001.

Americans (*M* = 3.20, *SD* = .95) were revealed to make greater use of the strategies subsumed by the *rumination and withdraw* index than Norwegians, (*M* = 2.61, *SD* = .76), p < .001, and Australians, (*M* = 2.62, *SD* = .90), p < .001.

Mood regulation strategies across personality traits

Correlations between personality traits and mood regulation strategies are reported in Table 5. Extraversion correlated positively with the use of strategies involving *venting and expressing*, r = .37, p < .001, *cognitive engagement*, r = .29, p < .001, *active distraction*, r = .28, p < .001, *behavioural engagement*, r = .27, p < .001, and correlated negatively with the use of strategies involving *rumination and withdrawal*, r = -.14, p < .001.

Neuroticism correlated positively with r*umination and withdrawal*, r = .36, p < .001, *passive distraction and acceptance*, r = .19, p < .001, and *waiting and reframing*, r = .18, p < .001, and correlated negatively with the use of strategies involving c*ognitive engagement*, r = -.29, p < .001.

Self-Reflection was significantly correlated with five of the seven MARS indices. Of particular note were the positive correlations found between Self Reflection and *Rumination and Withdrawal*, r = .39, p < .001, and *Waiting and Reframing*, r = .23, p < .001.

Insight was significantly correlated with four of the seven MARS indices. Whilst none of the correlations were particularly strong, the positive correlations between Insight and *venting and expressing*, r = .22, p< .001, and *cognitive engagement*, r = .19, p < .001, are noteworthy.

Multiple regression analyses were conducted in which extraversion, neuroticism, self-reflection, and insight were used to predict scores on the various MARS indices.

The set of variables predicted 25% of the variance in the use of *rumination and withdrawal* strategies, R^2 (4,480) = .25, p < .001. Self-Reflection predicted unique variance in the use of *rumination and withdrawal* strategies (ß = .39, p < .001), as did Neuroticism (ß = .27, p < .001).

The set of variables predicted 18% of the variance in the use of *venting and expressing affect* strategies, R^2 (4,480) = .18, p < .001 with Extraversion as the strongest predictor (ß = .38, p < .001), followed by Insight (ß = .15, p < .01).

 The set of variables predicted 17% of the variance in the use of *cognitive engagement* strategies, R^2 (4,480) = .17, p < .001. In this case, Neuroticism predicted unique variance in the use of *cognitive engagement* strategies (ß = -.25, p < .001), as did Self-Reflection (ß = .21, p < .001), and Extraversion (ß = .19, p < .001).

Mood regulation strategies and well being

 Table 6 describes the correlations found between the seven MARS indices and each of the four well-being measures. *Active distraction* was significantly and positively correlated with Positive Affect, r = .24, p < .001. It was also positively and significantly correlated with Satisfaction with Life, r = .13, p < .01, however the correlation was much weaker. Strategies involving *cognitive engagement* were positively correlated with Positive Affect, r = .39, p < .001, and Satisfaction with Life, r = .37, p < .001, and negatively correlated with Depressed Mood, r = -.18, p < .001, and Negative Affect, r = -.19, p < .001. *Behavioural engagement* strategies were positively correlated with Positive Affect, r = .41, p < .001, and Satisfaction with Life, r = .24, p < .001. *Venting and expressing* strategies were positively correlated with Satisfaction with Life, r = .27, p < .001 and Positive Affect, r = .23, p < .001, and negatively with Depressed Mood, r = -.21, p < .001.

 Passive distraction and acceptance strategies were positively correlated with Depressed Mood, r = .24, p < .001, and Negative Affect, r = .22, p < .001. *Rumination and withdrawal* strategies were also positively correlated with Depressed Mood, r = .38, p < .001, and Negative Affect, r = .30, p < .001. Similarly, strategies involving *waiting and reframing* were positively correlated with Depressed Mood, r = .30, p < .001, and Negative Affect, r = .25, p < .001.

 To explore whether the strength of the correlations between the mood regulation strategies and the well-being outcomes were different for males and females, the data was split by gender and the analyses were repeated. Based on a visual inspection of the results, the correlation coefficients that were suspected of being significantly different for males and females were then further tested to uncover if any such differences were significant. These analyses did not produce any significant results.

A mediating effect?

 The Sobel test is used to investigate whether a mediator variable carries the effect of an independent variable to a dependent variable (Preacher & Hayes, 2004). To test whether strategy usage mediated the effect that extraversion and neuroticism (independent variables)

had upon the well-being measures (dependent variables), two summary measures were firstly constructed. The first measure combined the scores of each of the effective strategy indices (*cognitive engagement, behavioural engagement, venting and expressing*) whilst the other combined the scores of each of the ineffective strategy indices *(rumination and withdrawal, passive distraction and acceptance, and waiting and reframing)*. These were the mediator variables. Eight separate Sobel tests were conducted. The first four tested whether the use of effective strategies mediated the effect of extraversion on each of the well-being measures and the second four tested whether the use of ineffective strategies mediated the effect of neuroticism on each of the well-being measures. None of these analyses produced significant results, hence the affect regulation strategies did not mediate the effect of extraversion and neuroticism upon well-being.

Discussion

Affect specificity in strategy use

As no other studies had specifically explored the role of affect specificity in the use of mood regulation strategies, the hypothesis proposed in the present study was purposely broad and unspecific. It was posited that individuals make differential use of mood regulation strategies depending upon the mood state experienced. The hypothesis was partially confirmed by the empirical data. For several affective states, a large percentage of participants reported a propensity to use a particular strategy type. In the case of boredom (where distraction was the most frequently endorsed strategy), and in the case of loneliness (where socialising was the most frequently endorsed strategy), individuals reported choosing strategies which, based on the mood state experienced, have adaptive value.

It was not consistently found, however, that different affective states resulted in the use of different mood regulation strategies. Participants reported *talking* as the strategy they would be most likely to use when feeling *worried, anxious, sad,* and *angry* which points to a potential 'over-reliance' on this strategy. Whilst *talking* is possibly adaptive when experiencing certain mood states, it may be less adaptive when applied indiscriminately. As previously discussed, Gondolf (1985) and Straus et al., (1980) have shown that talking about one's angry feelings tends to strengthen and prolong those feelings as opposed to dampening them. Larsen (1993) reported that expressing oneself when feeling sad was associated with heightened levels of sadness. It is evident, however, that females show this tendency to rely on *talking* as a mood regulation strategy more so than males. When the strategies were

analysed by gender, the most frequently used strategies by women and men were actually different when feeling either worried or anxious. Here, in both cases, women reported *talking* as the most frequently used mood regulation strategy whilst men reported that they most frequently *do something active* in order to regulate their moods. The results indicate, therefore, that men appear to have a more varied repertoire of strategies that they employ to regulate their moods than women.

Gender, culture and strategy use

A particular goal of the present study was to produce a current assessment of the most frequently endorsed mood regulation strategies amongst men and women. Based on previous research (Butler & Nolen-Hoeksema, 1994; Nolen-Hoeksema & Corte, 2004; Raver, 1996; Thayer, et al., 1994; Tice & Baumeister, 1993), it was hypothesised that men and women would differentially use mood regulation strategies. Of the seven indices of the MARS, women reported significantly greater use of the strategies subsumed by five of those indices than men: *active distraction, venting and expressing, passive distraction and acceptance, rumination and withdrawal,* and *waiting and reframing*. It is difficult to draw conclusions about the reasoning for this. Perhaps women make more frequent attempts to regulate their moods than men because they experience greater variation in their moods or perhaps they are more aware of their varying emotional states. It may be that women, more so than men, feel that moods are something that can be controlled and, hence, consciously employ a greater variation of techniques in an attempt to remedy their negative mood states. These explanations are purely speculative, of course, and should be the subject of future study. Both genders did report, however, similar use of the two most effective strategy types – *cognitive engagement* and *behavioural engagement*.

With regards to the strategy specific differences between the genders, it was found that, in line with our hypothesis, women were more inclined to socialise, vent (talk, express themselves, and write in a diary), and to eat in order to regulate their moods than their male counterparts. In addition to these confirmatory findings, it was also revealed that women tend to self-gift more than men to improve their mood states.

Our hypothesis suggesting that men would use make greater use of distraction strategies, such as exercising and alcohol consumption, than women in order to regulate their moods was not confirmed. No significant differences were found between men and women's reliance upon these specific strategies which contradicts prior research that has found this to be the case (Nolen-Hoeksema & Corte, 2004; Thayer et al., 1994; Tice & Baumeister, 1993). It was

also revealed that men were more likely than women to suppress their feelings and to withdraw, which are most often maladaptive strategies to employ when one considers both the short and the long-term implications of using these strategies (Fichman, et al, 1999; Gross & John, 2003; Larsen, 2003).

A novel element of the present study was the investigation of any intra-individualistic cultural distinctions in the type and frequency of strategy usage. Although there were no specific hypotheses regarding what actual differences would be found, it was assumed that cultural norms would exert some influence upon the type of strategies most frequently reported in the USA, Norway and Australia.

There were many significant differences found across the array of different strategies studied although most were subtle. The most interesting differences found in the present study related to strategies subsumed by the ineffective strategy index: *passive distraction and acceptance*. In terms of passive strategies, Americans and Australians were found to use prayer or other religious activity significantly more than Norwegians in order to alleviate a negative mood which is clearly related to cultural norms and values in these countries. Also, Americans and Australians were also more likely to eat food to regulate their moods than Norwegians. This is, of course, interesting when you consider that the USA and Australia rank numbers 10 and 22 respectively in the world in terms of their percentage of obese citizens (based on percentage of the population over 15 that have a BMI over 25). Norway, however, does not appear until number 92 on the same list (World Health Organisation, 2007). Whilst there are clearly many factors that contribute to obesity levels in a particular country (including the proliferation of cheap and unhealthy fast-food alternatives), the regular use of eating as a strategy to deal with negative mood states will, in all likelihood, only contribute to the escalating weight problems faced by western society.

Personality-based differences in strategy usage

Another proposition of the present study was that there are personality-based differences in the use of mood regulation states. Whilst previous research has found that levels of extraversion and neuroticism clearly effect the frequency and type of mood experienced (see Watson, 2000, p.180-2, for a review of the research), the aim of the present study was to provide evidence to support the proposition that these personality traits also have an effect upon the strategies used to regulate an experienced mood.

Based on prior research in the personality field which has have described extraverts as gregarious and talkative (e.g. Matthews & Deary, 1998), it was assumed that individuals who

score high on extraversion would be likely to reveal a propensity towards the use of socially-oriented strategies in order to regulate their moods. This was found to be the case. Extraversion was positively correlated with strategies encompassed by the index *venting and expressing affect*, the MARS index most related to outside others.

Although not predicted, this study also revealed moderate positive correlations between extraversion and *cognitive engagement* strategies, *behavioural engagement* strategies, and the use of *active distraction* strategies. *Cognitive* and *behavioural engagement* strategies, as discussed, have been found to be effective strategies to use to down-regulate a negative mood (Larsen, 1993, as cited in Larsen & Prizmic, 2004; Totterdell & Parkinson, 1999). They require the individual to *take action*, either mentally or physically, to deal with their negative mood. It can be speculated that extraverts have the 'get up and go' required to actively involve themselves in altering their own mood state. Prior research has shown extraverts tend to be more energetic than introverts (Watson & Clark, 1992) and it is perhaps this elevated level of energy that means they are more willing or capable of taking the action required to alleviate a negative mood than introverts. This is, of course, purely speculative.

The prediction that those who score low on extraversion (i.e. introverts) would be likely to rely on asocial strategies such as withdrawal was also supported by this study although the relationship was fairly weak.

Personality researchers have consistently found that individuals high in neuroticism tend to be anxious, and be easily stressed (Matthews & Deary, 1998). Based on their generally negative disposition, it was proposed that individuals high in neuroticism would frequently make use of ineffective strategies to alter their mood states. Such strategies could include ruminating and consumptive behaviours such as eating and drinking coffee. Additionally, they would be less likely to employ more effective strategies such as distraction and cognitive reappraisal. This was effectively confirmed by our study. The more highly neurotic the individual, the less likely they were to utilise *cognitive engagement* strategies, and the more likely they were to *ruminate and withdraw* and to utilise *passive distraction and acceptance* strategies, such as eating, drinking etc. *Active distraction* was found to be unrelated, however, to degree of neuroticism.

The two sub-components of private self-consciousness, self-reflection and insight, were presumed to differentially impact the use of mood regulation strategies. Past research linking insight with positive well-being outcomes (Grant et al., 2002), prompted the hypothesis that a high level of insight would be a predictor in the proclivity to use effective mood regulation strategies. This was not found to be the case in this study however. Degree of insight was not

found to be associated with the use of the effective MARS strategy indices: *cognitive engagement and behavioural engagement*. *Venting and expressing affect* was found in the present study to actually be associated with positive outcomes and this strategy type was, in fact, found to correlate significantly in a positive direction with insight. Still, based on the lack of association between insight and the other effective strategy types, it does not appear that the clarity of one's understanding of an experienced mood state is particularly helpful in the choice of effective strategies.

It was found, conversely, that high scores on self-reflection were related to the use of ineffective strategies. Self reflection was strongly and positively correlated with *rumination and withdrawal* and moderately correlated with *waiting and reframing*. It appears, therefore, that being inspective and judgemental about one's negative mood state does not facilitate the use of effective strategies to regulate that mood. Conversely, self-reflection, appears to promote the use of passive, ineffective strategies. This finding could possibly help to explain Grant and colleague's (2002) findings that linked self-reflection with negative well-being outcomes such as anxiety and stress.

A focus on subjective well-being

In contrast to previous studies in the field, the present study placed great emphasis upon SWB as the over-arching outcome variable of strategy usage. This unique emphasis clearly separates this study from earlier research which has focused predominantly on the short-term effectiveness of the various affect regulation strategies (Larsen, 1993, as cited in Larsen & Prizmic, 2004; Parkinson & Totterdell, 1999; Prizmic, 2000 as cited in Larsen & Prizmic, 2004; Thayer et al., 1994).

Interestingly, however, the findings in the present study were generally in line with those prior studies with a short-term focus. It was found that *cognitive and behavioural engagement* strategies were related to positive well-being outcomes. *Passive distraction and acceptance,* and *rumination and withdrawal* were related to negative well-being outcomes. Although it was not hypothesised, *waiting and reframing* strategies were also found to be related to negative well-being outcomes.

As discussed, the relative merits of using venting and expressing strategies to regulate one's mood have been disputed by many academics (Baumeister et al., 1994; Gondolf, 1985; Larsen, 1993, as cited in Larsen & Prizmic, 2004; Straus et al., 1980) and it was, therefore, predicted that the use of these strategies would result in the up-regulation or prolongation of negative mood states. The findings of present study, however, support the notion that venting

and expressing are *positive* strategies to utilise, both in the short and long term. Such strategies were found to be negatively related to depressed mood, and positively related to positive affect and satisfaction with life. This finding is in contrast to the majority of recent research in this area.

The present study found that *active distraction* was moderately and positively associated with PA, however, its relationship to SWL was rather weak. This finding indicates that whilst *active distraction* strategies may prove to be useful for the short-term down-regulation of negative mood states, the long term benefits of relying on these types of strategies for mood regulation are less positive. Strategies such as *cognitive engagement*, *behavioural engagement*, and *venting and expressing* certainly appear, from the results of the present study, to have stronger associations with SWB.

A final important finding of this study was that affect regulation strategies did not mediate the effect of extraversion and neuroticism upon subjective well-being. This means that the strategies have a unique effect on SWB, independent of the effects of extraversion and neuroticism. This is an important finding when one considers the potential for changing maladaptive emotion regulation strategies through, for example, intervention programs.

Limitations of the study

A limitation of the present study is that it is a purely descriptive study and causation, therefore, cannot be established. The data collected only tells us that there *is* a relationship between the various individual differences variables and the mood regulation strategies used and between the strategies used and subjective well-being. The underlying causal mechanisms, however, are not explained.

For example, two models can potentially explain the observed relationships. It can be argued that personality variables affect the type of strategy used to regulate a mood state which, in turn, has a long term effect on well-being. Alternatively, it could be argued that the personality variables directly affect well-being and it is one's well-being that determines the type of strategy used to regulate one's mood.   Both models described fit the data and could reasonably explain the relationship between these variables. Uncovering just which model correctly describes these mechanisms must be the subject of future research.

Anther limitation of this study was the inclusion of three individualistic cultures and the absence of a collectivist culture. Given the similarity of the cultures in American, Australia and Norway, it is perhaps not surprising that few overt differences in strategy usage were found. Future research in the field should focus additionally on collectivist cultures if more

substantive cultural differences are to be revealed. Additionally, because the participants were all university students of psychology, it would not be appropriate to indiscriminately generalise the results to the general population.

Conclusion

The present study was concerned principally with investigating the issues of affect and person specificity in the use of mood regulation strategies, and the exploration of the relationship between strategy usage and subjective well-being. The key findings of the study were: (i) For certain affective states, individuals show a tendency to use the same adaptive strategy to improve their moods. This was not found for all affective states however. Females revealed a tendency to utilise venting and expressing strategies, seemingly somewhat regardless of the mood state experienced, whilst men often tried to distract themselves from their moods; (ii) There are a variety of individual differences variables that appear to affect which strategies are used to regulate one's mood, albeit in a variety of different ways and to different degrees. These variables include gender, culture, and degree of extraversion, neuroticism, self-reflection and insight; (iii) Higher levels of subjective well-being are linked to the use of *cognitive* and *behavioural engagement* and *venting and expressing* strategies. The present study has made a unique contribution to the field by providing an extensive mapping of an area of mood regulation theory that has previously been neglected by research and raises many important questions to be addressed by future studies in the field.

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Appendix 1

13 broad groupings of strategy types (with examples) used in the study of affect specificity.

1.   *Distraction*: I try to think of other things, or try to do something to distract myself (for example, watch TV, read a book, work).

2.   *Talking*: I express my feelings by, for example, talking to someone about them.

3.   *Suppression*: I try not to show my feelings.

4.   *Reinterpretation*: I try to reinterpret the situation to find a new meaning, or I try to find something good in the situation.

5.   *Social comparison*: I compare myself with people who are worse off than I am.

6.   *Doing something active*: I take action to solve the problem, or I make plans to avoid such problems in the future.

7.   *Reward*: I treat myself to something special, or something I really like.

8.   *Exercise/consumption*: I exercise, eat, drink, or sleep to get rid of my bad mood.

9.   *Socialising*: I socialise with friends or family in order to forget my bad mood.

10.   *Withdrawal*: I want to be alone. I withdraw from or avoid the situation.

11.   *Grateful*: I try to be grateful for the good things in my life.

12.   *Helping others*: I do what I can to help others.

13.   *Laugh/joke*: I laugh, joke, or try to make myself or others laugh.

Table 1

Descriptives of study participants.

	Total N	Men	Women	< 25 years	=/> 25 years
Total sample	489	140	349	399	85
Norway	193	54	139	147	46
United States	211	65	146	206	4
Australia	85	21	64	50	35

Table 2

Most frequently used mood regulation strategy based on mood state experienced (percentage of total in parenthesis).

	Most frequently reported strategy type		
Mood state experienced	*N*	Females	Males
Bored	Distraction (63.8)	Distraction (64.5)	Distraction (62.1)
Lonely	Socialising (49.5)	Socialising (52.7)	Socialising (42.4)
Worried	Talking (35.4)	Talking (43.7)	Doing something active (29.3)
Anxious	Talking (28.6)	Talking (34.9)	Doing something active (17.1)
Sad	Talking (29.2)	Talking (33.7)	Talking (18.6)
Angry	Talking (40.5)	Talking (45.2)	Talking (29.5)

Table 3

Summary and comparison of means (standard deviations in parentheses) of MARS indices and items by gender.

MARS items (grouped by index)	Total Sample	Female	Male	*t*
Active distraction	*2.94 (.80)*	*3.00 (.79)*	*2.79 (.81)*	*2.60**
I socialise.	3.22 (1.53)	3.41 (1.50)	2.74 (1.52)	4.48**
I do something fun, something I really enjoy.	3.86 (1.31)	3.90 (1.27)	3.76 (1.41)	1.03
I watch TV, read a book, listen to music.	3.42 (1.44)	3.51 (1.41)	3.21 (1.52)	2.04
I use alcohol.	1.09 (1.29)	1.03 (1.21)	1.24 (1.45)	-1.64
I laugh, joke around, try to make myself or others laugh.	3.54 (1.50)	3.48 (1.51)	3.71 (1.49)	-1.59
I treat myself to something special.	2.99 (1.30)	3.14 (1.23)	2.61 (1.39)	4.12**
I play sports, exercise.	3.17 (1.63)	3.10 (1.59)	3.35 (1.73)	-1.52
I think about something to distract myself from my feelings.	3.22 (1.28)	3.30 (1.23)	3.02 (1.37)	2.21
Cognitive engagement to manage the affect	*3.77 (.98)*	*3.77 (.97)*	*3.77 (1.02)*	*.03*
I try to think about those things that are going well for me.	3.99 (1.32)	4.01 (1.25)	3.94 (1.47)	.60
I try to be grateful for the things in my life that are going well.	4.43 (1.32)	4.46 (1.30)	4.36 (1.37)	.71
I try to put things into perspective.	4.07 (1.16)	4.05 (1.12)	4.14 (1.25)	-.75

Cognitive engagement to manage the affect (cont.)

I try to find something good in the situation.	3.69 (1.30)	3.68 (1.28)	3.71 (1.36)	-.22
I compare myself to people who are worse off.	2.68 (1.43)	2.66 (1.41)	2.71 (1.50)	-.30
Behavioural engagement to manage the affect	*3.35 (.80)*	*3.36 (.78)*	*3.32 (.84)*	*.51*
I make plans or resolution to avoid such problems in future.	3.73 (1.30)	3.70 (1.24)	3.78 (1.42)	-.63
I work on something or stay busy.	3.05 (1.29)	3.15 (1.26)	2.81 (1.35)	2.66*
I take action to solve the problem.	3.87 (1.18)	3.81 (1.18)	4.01 (1.16)	-1.73
I go out of my way to help someone.	2.98 (1.44)	3.02 (1.45)	2.88 (1.41)	1.00
Venting and expressing affect	*3.22 (.93)*	*3.39 (.92)*	*2.79 (.82)*	*6.63***
I let my feelings out by expressing them.	3.56 (1.42)	3.81 (1.37)	2.94 (1.37)	6.40**
I try to not let my feeling show, to suppress any expression (rev).	3.77 (1.33)	3.88 (1.34)	3.49 (1.26)	2.98*
I talk to someone or my friend about my feelings.	4.06 (1.53)	4.37 (1.40)	3.26 (1.55)	7.66**
I keep for myself, I want to be alone (rev).	3.56 (1.34)	3.68 (1.30)	3.26 (1.39)	3.17*
I talk to an advisor or mentor.	1.14 (1.46)	1.18 (1.48)	1.01 (1.40)	1.16
Passive distraction and acceptance	*2.17 (1.08)*	*2.28 (1.09)*	*1.89 (.97)*	*3.75***
I pray, put my faith in God, or do something religious.	1.65 (1.93)	1.70 (1.95)	1.53 (1.88)	.89

Passive distraction and acceptance (cont.)				
I try to accept it as my fate, what will be will be.	2.61 (1.62)	2.68 (1.56)	2.44 (1.76)	1.47
I drink coffee or caffeinated beverages.	2.17 (1.93)	2.27 (1.94)	1.94 (1.90)	1.73
I eat something.	2.17 (1.57)	2.39 (1.56)	1.64 (1.45)	4.92**
Rumination and withdrawal	*2.87 (.92)*	*3.00 (.89)*	*2.54 (.92)*	*5.10***
I write about my feeling in diary.	1.99 (1.87)	2.31 (1.86)	1.19 (1.56)	6.25**
I withdraw from or avoid the situation.	2.53 (1.29)	2.58 (1.29)	2.39 (1.25)	1.56
I sleep or take a nap.	2.73 (1.60)	2.79 (1.53)	2.58 (1.76)	1.30
I try to understand my feelings by thinking and analysing them.	4.23 (1.36)	4.31 (1.32)	4.02 (1.44)	2.15
Waiting and reframing	*2.79 (1.06)*	*2.86 (1.06)*	*2.59 (1.03)*	*2.58**
I try to reinterpret the situation, to find different meaning.	3.39 (1.39)	3.42 (1.37)	3.31 (1.45)	.83
I daydream of the time when I will not have this problem.	2.84 (1.77)	2.97 (1.76)	2.49 (1.76)	2.73*

Note. MARS = Measure of Affect Regulation Styles.

* $p < .01$. ** $p < .001$.

Table 4

Summary and comparison of means (standard deviation in parentheses) for MARS indices and items by culture.

MARS items (grouped by index)	Norway	Australia	USA	*F*	Sig. contrasts
Active distraction	*2.98 (.70)*	*2.92 (.93)*	*2.91 (.83)*	*.43*	
I socialise.	3.48 (1.42)	2.94 (1.61)	3.09 (1.57)	5.13*	1,2
I do something fun, something I really enjoy.	3.69 (1.20)	3.91 (1.43)	4.00 (1.35)	2.92	
I watch TV, read a book, listen to music.	3.32 (1.34)	3.27 (1.50)	3.59 (1.50)	2.31	
I use alcohol.	1.20 (1.20)	1.25 (1.40)	.91 (1.30)	3.36	
I laugh, joke around, try to make myself or others laugh.	3.52 (1.40)	3.68 (1.53)	3.51 (1.59)	.44	
I treat myself to something special.	2.95 (1.16)	3.13 (1.35)	2.97 (1.40)	.60	
I play sports, exercise.	3.29 (1.46)	3.18 (1.71)	3.07 (1.74)	.87	
I think about something to distract myself from my feelings.	3.35 (1.11)	3.14 (1.26)	3.14 (1.42)	1.66	
Cognitive engagement to mange the affect	*3.91 (.75)*	*3.92 (.95)*	*3.58 (1.14)*	*6.95**	2,3
I try to think about those things that are going well for me.	4.25 (1.04)	4.18 (1.25)	3.68 (1.50)	11.08**	2,3
I try to be grateful for the things in my life that are going well.	4.67 (1.07)	4.44 (1.38)	4.21 (1.50)	6.14*	2
I try to put things into perspective.	4.00 (1.08)	4.34 (1.03)	4.03 (1.27)	2.81	

Cognitive engagement to manage the affect (cont.)					
I try to find something good in the situation.	3.81 (1.06)	3.76 (1.32)	3.54 (1.47)	2.43	
I compare myself to people who are worse off.	2.82 (1.24)	2.89 (1.58)	2.46 (1.51)	4.38*	2
Behavioural engagement to manage the affect	*3.35 (.70)*	*3.47 (.78)*	*3.30 (.87)*	*1.38*	
I make plans or resolution to avoid such problems in future.	3.50 (1.27)	4.07 (1.13)	3.79 (1.34)	6.34*	1
I work on something or stay busy.	2.85 (1.25)	3.16 (1.29)	3.19 (1.32)	3.92	
I take action to solve the problem.	3.75 (1.11)	4.13 (1.09)	3.87 (1.26)	3.06	
I go out of my way to help someone.	3.31 (1.26)	2.86 (1.43)	2.73 (1.55)	8.55**	1,2
Venting and expressing affect	*3.18 (.85)*	*3.51 (.86)*	*3.13 (1.01)*	*5.38**	1,3
I let my feelings out by expressing them.	3.60 (1.35)	3.54 (1.38)	3.54 (1.52)	.09	
I try to not let my feeling show, to suppress any expression (R).	3.87 (1.22)	3.93 (1.42)	3.61 (1.38)	2.77	
I talk to someone or my friend about my feelings.	4.07 (1.43)	4.21 (1.54)	3.98 (1.62)	.70	
I keep for myself, I want to be alone (R).	3.55 (1.31)	3.81 (1.27)	3.46 (1.39)	2.15	
I talk to an advisor or mentor.	.79 (1.24)	2.06 (1.67)	1.08 (1.40)	24.76**	1,3
Passive distraction and acceptance	*1.97 (1.11)*	*2.21 (1.07)*	*2.34 (1.01)*	*6.26**	2
I pray, put my faith in God, or do something religious.	1.22 (1.70)	1.87 (2.07)	1.96 (2.00)	8.35**	1,2

Passive distraction and acceptance (cont.)					
I try to accept it as my fate, what will be will be.	2.52 (1.43)	2.64 (1.77)	2.69 (1.74)	.59	
I drink coffee or caffeinated beverages.	2.34 (1.80)	1.94 (1.92)	2.11 (2.05)	1.45	
I eat something.	1.62 (1.35)	2.40 (1.63)	2.59 (1.58)	22.39**	1,2
Rumination and withdrawal	*2.61 (.76)*	*2.62 (.90)*	*3.20 (.95)*	*27.42** *	2,3
I write about my feeling in diary.	1.60 (1.73)	1.72 (1.72)	2.45 (1.95)	12.03**	2,3
I withdraw from or avoid the situation.	2.45 (1.15)	2.33 (1.26)	2.68 (1.39)	2.85	
I sleep or take a nap.	2.31 (1.34)	2.13 (1.54)	3.35 (1.64)	31.63**	2,3
I try to understand my feelings by thinking and analysing them.	4.08 (1.32)	4.29 (1.32)	4.34 (1.40)	2.02	
Waiting and reframing	*3.16 (1.14)*	*2.34 (.89)*	*2.63 (.93)*	*23.72** *	1,2
I try to reinterpret the situation, to find different meaning.	3.34 (1.25)	3.56 (1.59)	3.36 (1.44)	.77	
I daydream of the time when I will not have this problem.	2.97 (1.71)	2.46 (1.75)	2.87 (1.83)	2.51	

Note. MARS = Measure of Affect Regulation Styles.

* p < .01. ** p <.001.

[1]Significant difference found between Norway and Australia

[2]Significant difference found between Norway and USA

[3]Significant difference found between Australia and USA

Table 5

Bivariate correlations (Pearson's) amongst individual differences variables and MARS

indices.

	Individual Differences Variables			
MARS Indices	Extraversion	Neuroticism	Self-Reflection	Insight
Active distraction	.28**	-.07	.00	-.06
Cognitive engagement	.29**	-.29**	.18**	.16**
Behavioural engagement	.27**	-.08	.18**	.10*
Venting and expressing affect	.37**	.-05	.16**	.21**
Passive distraction and acceptance	.05	.19**	.09	-.13*
Rumination and withdraw	-.14**	.36**	.40**	-.14*
Waiting and reframing	-.08	.18**	.24**	-.19**

Note. MARS = Measure of Affect Regulation Styles.

* p <.01. ** p <.001.

Table 6

Bivariate correlations (Pearson's) amongst measures of well-being and MARS indices.

MARS Indices	Depressed Mood	Negative Affect	Positive Affect	Satisfaction With Life
Active distraction	.07	.05	.24**	.13*
Cognitive engagement	-.18**	-.19**	.39**	.37**
Behavioural engagement	-.03	.00	.41**	.24**
Venting and expressing affect	-.21**	-.07	.23**	.27**
Passive distraction and acceptance	.24**	.22**	-.04	-.04
Rumination and withdrawal	.38**	.30**	-.10	-.14*
Waiting and reframing	.30**	.25**	.05	-.15**

Note. MARS = Measure of Affect Regulation Styles.

* p <.01. ** p <.001.

Figure 1

Variables under investigation in the study of person specificity in mood regulation.

Individual differences variables

Gender   Culture
Extraversion   Neuroticism
Self-Reflection Insight

Mood regulation strategies

Active distraction
Cognitive engagement
Behavioural engagement
Venting and expressing
Passive distraction and acceptance
Rumination and withdrawal
Waiting and reframing

Well-being outcomes

Depressed mood
Negative affect
Positive affect
Satisfaction with life