Mood and Maladaptive Behaviour: The Effect of Emotional Intelligence, Personality, and Mood on Emotional Manipulation

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Statement of Sources

I declare that this report is my own work and that the contributions of others have

been duly acknowledged.

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Catharine Allen　　　　　　　　　　　　　　　　Date

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Abstract

The current study aimed to investigate mechanisms of emotional manipulation, by examining the combined predictive utility of emotional intelligence, agreeableness, conscientiousness and mood, within a correlational design, with an experimental longitudinal component. Participants (155 male and female undergraduate students) completed measures of personality and emotional intelligence before undergoing a mood induction procedure (happy, sad, and neutral). Participants then reported their ability and willingness to emotionally manipulate, as well as to adopt specific emotional manipulation strategies. It was hypothesised that personality and emotional intelligence would predict emotional manipulation, with strongest effects with mood-worsening and inauthentic strategies. It was also expected that worse moods would be associated with greater emotional manipulation. Hypotheses received mixed support. Personality and emotional intelligence did predict emotional manipulation, however this did not differ across aspects of emotional manipulation. Only the use of inauthentic strategies was predicted by sad moods. Future research could explore these findings across different contexts, in addition to using ability measures of emotional manipulation. It can be concluded that emotional intelligence, agreeableness, and conscientiousness are predictors of emotional manipulation. The current study has implicated mood as predictor for the first time, however further research is needed clarify its role.

An emotion is a series of changes in neurophysiological, physiological and cognitive states in response to a stimulus (Scherer, 2005). Studying emotions is important as emotional responses guide our thoughts and behaviours (Izard, 2010) and are associated with important outcomes such as physical and mental health (Martins, Ramalho, & Morin, 2010). The ability to recognise and control your own and others' emotions is known as emotional intelligence, which is a construct that encapsulates the adaptive nature of emotional capabilities (Petrides & Furnham, 2000). However, other research has investigated whether positive emotional skills usually associated with emotional intelligence are used for malicious purposes (Austin, Farrelly, Black, & Moore, 2007), specifically to emotionally manipulate other people. The current study aimed to identify personality trait influences in the emotional intelligence and emotional manipulation relationship, and further, to examine the role of mood in emotional manipulation for the first time.

Models and Measures of Emotional Intelligence

Emotional intelligence is described in the literature as an ability, or as a trait (Petrides, Pita, & Kokkinaki, 2007). Salovey and Mayer (1990) conceptualised emotional intelligence as an ability that involves a relationship between cognitive processing and emotion. That relationship is reflected in their hierarchical model of (Mayer & Salovey, 1997), which comprises four branches. The most basic branch involves emotion perception, appraisal, and expression. The second branch describes using emotions to facilitate thought. Branch three incorporates analysing complex emotions, and the fourth branch describes emotional self-regulation and emotional management of others to promote adaptive outcomes (Mayer & Salovey, 1997). As Salovey and Mayer (1990) conceptualised emotional intelligence as the

ability to perform emotion related tasks, they assessed performance on tasks as correct or incorrect as determined by panel-derived expert criterion convergence.

Although both trait and ability measures address understanding, regulating and managing emotions, they are distinct and should not be used interchangeably (Petrides & Furnham, 2001) as their relationships with outcomes differ in strength (Brackett & Mayer, 2003). Trait emotional intelligence describes typical behaviour, and is assessed by self-report measures (Petrides & Furnham, 2000). Like ability models, trait models comprise intrapersonal and interpersonal components, but also facets measuring emotional adaptability and general mood. Trait measures have been criticised as overlapping with measures of related traits and constructs such as optimism and happiness (Petrides et al., 2007). However they have the advantage of capturing the subjectivity of emotional experiences, and are less complex to score than ability measures (Petrides et al., 2007). Further, ability tests have been critiqued based on concerns with construct validity (e.g. Maul, 2012; Schlegel, 2016) and a reliance on expert and consensus based scoring (e.g. Brackett, Rivers, & Salovey, 2011). For those reasons, this study is concerned only with trait emotional intelligence.

Emotional Intelligence: The Good, the Bad, and the Ugly

The suggestion that emotional intelligence leads to better wellbeing (Mayer and Salovey, 1990) is evident in its association with positive outcomes and success (Petrides, Pérez-González, & Furnham, 2007). Martins, Ramalho, and Morin (2010) examined the relationship between emotional intelligence and health in a meta-analysis of 67 studies. Emotional intelligence showed an overall positive moderate-sized relationship with physical, psychosomatic, and mental health. A more recent review (Petrides et al., 2016) confirmed the advantages of high emotional

intelligence in regards to psychological and physical health. This implies that being adept at recognising and controlling emotions relates to better wellbeing.

High emotional intelligence also benefits others (Smith, Heaven, & Ciarrochi, 2008). Smith et al. found that emotional intelligence positively predicted relationship satisfaction. This finding was also noted by Malouff, Schutte, and Thorsteinsson (2014), whose meta-analysis indicated a moderate-sized positive relationship between trait emotional intelligence and romantic relationship satisfaction. The interpersonal benefit of emotional intelligence has also been demonstrated in the workplace (Petrides et al., 2016; Schutte & Loi, 2014). From a trait perspective, the interpersonal benefits of emotional intelligence are seen through its positive associations with agreeableness (Saklofske, Austin, & Minski, 2003) and conscientiousness (Austin et al., 2007), as those traits reflect being helpful, dependable and trustworthy (Lee & Ashton, 2004). Those relationships with positive traits and interpersonal outcomes suggest that Emotional Intelligence is pro-social, as benefits people with whom you interact.

The potential for emotional intelligence to be used maliciously was originally identified by Salovey and Mayer (1990). However, it is only more recently that the self-serving aspect of emotional intelligence has been studied (Austin et al., 2007), specifically by investigating whether individuals use emotional skills to benefit themselves (e.g. Austin, Saklofske, Smith, & Tohver 2014; Grieve & Mahar, 2010;). This "dark" side of emotional intelligence is termed emotional manipulation, and has been studied using the relationship between emotional intelligence and Machiavellianism.

The concept of a Machiavellian personality stems from the political style and writings of Niccolò Machiavelli, who was renowned for his use of duplicitous means

to gain power (Christie & Geis, 1970). Machiavellian behaviour is characterised by deceptive and manipulative behaviours (Christie & Geis, 1970), and by a lack of moral regard (Paulhus & Williams, 2002). Individual differences in Machiavellianism have been studied from the perspective of personality, with moderate negative relationships found between Machiavellianism and both agreeableness and conscientiousness (Jakobwitz & Egan, 2006; Paulhus & Williams, 2002). Thus, conceptually, people with manipulative tendencies are less likely to possess pro-social traits, as they are less good-natured and less reliable.

If being pro-social decreases manipulative behaviours, a negative relationship would be expected between Machiavellianism and emotional intelligence, as like agreeableness, emotional intelligence is pro-social. Austin et al. (2007) found a moderate negative relationship between emotional intelligence and Machiavellianism, which has since been substantiated (Ali, Amorim, & Chamorro-Premuzic, 2009; O'Connor & Athota, 2013). Notably, the relationship found between emotional intelligence and Machiavellianism was stronger when emotional intelligence was measured using items relating to managing others' emotions (Austin et al., 2007). Although the negative direction of those relationships is not directly suggestive of a malicious use of pro-social abilities, it highlights the importance of the emotional management of others within those relationships.

Managing others' emotions for self-benefit is only one aspect of Machiavellianism. For that reason, Austin et al. (2007) developed the Emotional Manipulation Scale in order to eliminate capturing variance unrelated to emotional manipulation. Emotional manipulation and Machiavellianism shared 16% of variance, suggesting that they are separate constructs despite sharing features (Austin et al., 2007). However, the "dark" side of emotional intelligence was still not

evident, as emotional intelligence and emotional manipulation were unrelated. Although the interpersonal aspect of emotional intelligence, and emotional manipulation involve managing others' emotions, the key difference is that emotional intelligence is pro-social. It could thus be argued that the lack of relationship is due to the pro-social nature of interpersonal emotional intelligence.

Thus, accounting for pro-social characteristics in the emotional intelligence and emotional manipulation relationship by examining the influence of other predictors could result in demonstrating the use of positive emotional skills for darker purposes. As understanding the influence of additional predicting factors together is beyond the scope of a bivariate correlational analysis, using an analysis that allows multiple predictors of a behaviour is appropriate. That approach is also more ecologically valid, as factors that predict behaviour do not exist in isolation.

Predictors of Emotional Manipulation

Although emotional intelligence has no bivariate relationship with emotional manipulation (Austin et al., 2007; Hyde & Grieve, 2014), it positively predicts emotional manipulation when together with other related variables due to suppressor effects (Grieve & Mahar, 2010). A suppressor variable shows no bivariate relationship with an outcome variable, however its predictive validity improves when a related variable is present (MacKinnon, Krull, & Lockwood, 2000). Emotional intelligence and ethical reasoning together positively predicted emotional manipulation, when no relationship between emotional intelligence and emotional manipulation was found (Grieve and Mahar, 2010). As previously suggested, agreeableness and conscientiousness are pro-social, thus could explain why people use their emotions to help others as they are positively related (Austin et al., 2007).

Specifically, emotional intelligence, agreeableness, and conscientiousness could predict emotional manipulation.

O'Connor and Athota (2013) found that emotional intelligence and agreeableness positively predicted Machiavellianism, however they did not test that relationship using emotional manipulation. Grieve (2011) investigated the role of personality in predicting emotional manipulation. Self-monitoring, which is normally associated with emotional intelligence (Petrides, Pérez-González, & Furnham, 2007), positively predicted emotional manipulation, while agreeableness and conscientiousness negatively predicted emotional manipulation. This suggests that high self-monitoring, low agreeableness, and low conscientiousness increase the likelihood of emotional manipulation. However, the role of emotional intelligence was not considered by Grieve in that study. Given the positive relationship between self-monitoring and emotional intelligence, it could be argued that agreeableness, conscientiousness, and emotional intelligence could positively predict emotional manipulation. The current study aimed to investigate the combined contributions of those factors to emotional manipulation.

Mood and Helping Behaviours

Although personality is stable and enduring and predicts behaviour, behaviour varies across situations. This suggests that situational variables also predict behaviour (Fleeson, 2001). Mood states vary within an individual and are comparable to a situational variable (Scherer, 2005). A mood is a low intensity but pervasive subjective feeling that unlike emotions, does not always have an identifiable cause (Scherer, 2005). Rather, moods are a more general feeling that often lasts longer than an emotion (Beedie, Terry, & Lane, 2005). Although to date, no study has examined the effect of mood on anti-social or self-serving behaviour

such as emotional manipulation, studies have examined the effect of mood on pro-social behaviour.

The effect of mood on helping has been attributed to priming (Carlson et al., 1988). Network models of memory are cognitive paradigms that assume that memory is a network consisting of interconnected nodes, where nodes represent concepts. Nodes accumulate activation when a related stimulus is encountered. Once the activation level reaches a node's threshold, the node fires and activation spreads to other conceptually related nodes which can in turn cause related nodes to fire (Collins & Loftus, 1975). In those networks nodes are words, however nodes can also relate to mood states (Forgas, 2001). A node representing a mood would activate a node that represents a mood congruent behaviour. According to the Affect Infusion Model (Forgas, 1995), a positive mood facilitates pro-social behaviour, while a negative mood promotes defensive interpersonal behaviours.

Forgas et al. (2008) studied the effect of mood on helping behaviour. Employees were given positive or negative feedback to induce a positive or negative mood respectively. Helping was measured by the number of positive responses during discussions with customers. In less experienced assistants, helping behaviour was higher in the positive feedback condition, than in the neutral and negative feedback conditions. No effect of mood was found in the experienced group. The Affect Infusion Model (Forgas, 1995) proposes that the effect of mood lessens with experience in the relevant task. Although the concept of affective priming has been applied to pro-social behaviour, it has not been applied to self-serving behaviour, specifically to emotional manipulation.

Mood and Emotional Manipulation

According to affective priming (Forgas, 2001), a positive mood increases the likelihood of helping another. If this is the case, then a positive mood might decrease the likelihood of using emotional manipulation as you want to others, rather than helping oneself through malicious means. If a negative mood decreases helping behaviour because the need to help yourself is seen as more important than helping others, then a negative mood could increase self-serving tendencies, making it more likely that you help yourself through malicious means. The current study aims to investigate the effect of mood on emotionally manipulative tendencies for the first time.

The Present Study

Emotional manipulation negatively impacts the targets of this behaviour in workplace settings (Hyde, Grieve, & Scott, 2016). Linton and Power (2013) found that 38% of participants reported being bullied in their workplace once every week in the period up to 6 months prior to the study. Workplace harassment resulted in 2070 mental stress workers' compensation claims in 2011-12 (Safe Work Australia, 2015), which is suggestive of the negative psychological impact that emotional manipulation has on others. Hyde et al. found that being a perceived target of emotional manipulation is associated with higher reported levels of stress, anxiety and depression. Identifying the conditions under which individuals use positive emotional abilities with malicious intent, could result in interventions that encourage people to use their emotional skills in less harmful ways.

   Unpacking emotional manipulation.

There are several ways that emotional manipulation can be assessed. The Emotional Manipulation Scale (Austin et al., 2007) assesses the perceived ability to engage in emotionally manipulative behaviours, however other measures have been

developed from a different approach. Hyde and Grieve (2014) extended the

Emotional Manipulation scale (Austin et al., 2007) by modifying items to measure

how often people use emotional manipulation. That scale captures an individual's

willingness to engage in emotional manipulation rather than their perceived ability to

do so, as a person's reported ability to manipulate was urelated to their willingness to

manipulate (Hyde and Grieve, 2014).

The Managing the Emotions of Others Scale (MEOS; Austin & O'Donnell,

2013) includes subscales that measure the use of specific emotional manipulation

tactics. The mood-worsening subscale involves using anger and criticism to worsen

others' moods. This strategy is self-serving as it could be used in a vengeful manner.

The Inauthentic Strategy subscale measures the use of strategies such as sulking,

flattery or inducing guilt for self-gain. Both subscales showed strong positive

associations with Machiavellianism (Austin & O'Donnell, 2013), which were

stronger than found between emotional manipulation and Machiavellianism (Austin

et al., 2007). Agreeableness and conscientiousness were both more strongly related

to mood-worsening and inauthentic strategy (Austin and O'Donnell, 2013), than they

were with emotional manipulation ability (Austin et al., 2007). This suggests that the

self-serving subscales of the MEOS (Austin & O'Donnell, 2013) are more specific

measures than a measure of emotional manipulation.

For completeness, the current study therefore operationalised emotional

manipulation in four ways, using the Emotional Manipulation Ability Scale (Hyde &

Grieve, 2014), the Emotional Manipulation Willingness Scale (Hyde & Grieve,

2014), and the Mood-worsening and Inauthentic Strategy subscales of the MEOS

(Austin & O'Donnell, 2013). This broad approach to assessing emotional

manipulation was a novel one.

Aims and hypotheses.

The present study aimed to investigate the influence of emotional intelligence, agreeableness and conscientiousness on emotional manipulation. It was hypothesised that emotional intelligence, agreeableness, and conscientiousness would predict emotional manipulation. It was also predicted that more variance would be explained when measuring emotional manipulation with the MEOS subscales (Austin & O'Donnell, 2013) compared to the Emotional Manipulation Ability Scale (Hyde & Grieve, 2016), as the MEOS subscales are more specific measures.

Specifically, within the models, it was hypothesised that emotional intelligence would be positively related to emotional manipulation, and both agreeableness and conscientiousness would show negative relationships with emotional manipulation.

In addition to the contribution of emotional intelligence, agreeableness and conscientiousness to emotional manipulation, the present study aimed to investigate the effect of positive and negative moods following a mood induction procedure. Forgas et al (2008) found higher helping from positive than negative moods. This effect was explained through affective priming (Forgas, 2001). Conceptually, an increase in pro-social behaviour could decrease self-serving behaviour through helping others rather than yourself. Forgas also suggested that a negative mood primes defensive interpersonal behaviours, as you choose to help yourself, thus a negative mood could prime self-serving behaviour. It was therefore hypothesised that mood would significantly contribute to emotional manipulation on top of any influence of emotional intelligence, agreeableness, and conscientiousness.

Further, it was hypothesised that a positive mood would negatively predict emotional manipulation, and that a negative mood would positively predict emotional manipulation. All hypotheses were tested while controlling for gender, as gender differences have been shown to account for a significant proportion of variance in emotional manipulation, with males scoring higher than females (e.g. Grieve, 2011; Hyde & Grieve, 2014).

Method

Participants

The sample comprised 155 (28 males and 127 females) undergraduate psychology students who were invited to contribute their data for the purpose of this study. The mean age was 23.5 years (SD = 8.36, range 18 - 43). The majority of participants were Caucasian (87.74%), then Asian (5.81%), Aboriginal (1.29%), African American (0.65%), Pacific Islander (0.65%), and Hispanic (0.65%), and 3.23% reporting as 'Other'. Most participants (n = 141) reported English as their first language.

Design and Analysis

A correlational design with an experimental longitudinal component was used. Two sets of analyses addressed the hypotheses. At Time 1, predictor variables were emotional intelligence, agreeableness, and conscientiousness, with emotional manipulation as the outcome variable (emotional manipulation ability, emotional manipulation willingness, mood-worsening strategy, inauthenticity strategy). To test the effect of mood, mood was experimentally manipulated between-groups at Time 2, with three levels (happy, neutral and sad). The emotional manipulation measures were re-administered.

All hypotheses were tested with hierarchical multiple regression analyses. A hierarchical multiple regression analysis allows examination of how multiple variables predict an outcome variable. Predictor variables are entered progressively, allowing the estimation of variance that each step adds over and above previously entered predictors (Tabachnick & Fidell, 2012).

As mood was a categorical variable with more than two levels, dummy variables were created in order to examine the effect of mood on the outcome variables within the regression analysis. A dummy variable is a linear representation of the difference between the level of the variable of interest and all other levels of that variable (Field, 2013). The number of dummy variables that can be created from a categorical predictor variable is $g - 1$, where g = the number of levels (Cohen, Cohen, West, & Aiken, 2013).

Control variables. Gender differences in emotional manipulation have been noted previously with males scoring higher than females (Grieve, 2011; Hyde & Grieve, 2014). Differences in emotional manipulation between males and females were accounted for by entering gender as a control variable. Time 1 emotional manipulation scores were also controlled for in the Time 2 regressions, to account for individual differences in emotional manipulation.

***A priori* power analysis.** The number of participants needed for a multiple regression analysis is $104 + k$ (k = the number of predictor variables; Green, 1991). As the present study included four predictor variables for the Time 1 analysis (gender, emotional intelligence, Agreeableness, Conscientiousness) with three additional predictors for Time 2 (Time 1 emotional manipulation and, and the two dummy coded mood variables) the number of participants needed to detect a medium-sized effect was 111. The calculation is based on finding a medium sized

effect of f^2 = .15, where alpha = .05 and power = .8 (Cohen, 1992). The number of participants who took part in the current study exceeded the number required.

Materials

Copies of all measures and the mood induction stimuli are included in Appendices A1-A11.

Demographic information. Participant information requested included age, native language, and gender.

Emotional intelligence. Emotional intelligence was measured by the Self-Report Emotional Intelligence Scale (SREIS; Schutte et al., 1998). This 33-item scale is based on the model of emotional intelligence proposed by Salovey and Mayer (1997), and assesses an individual's perceived ability to recognise, analyse, and manage emotions in them self and in others. Participants rate their level of agreement with statements on a 5-point scale ranging from 1=*strongly disagree* to 5=*strongly agree*. Items include "I am aware of my emotions as I experience them", and "I help other people feel better when they are down". Some items are reverse scored, so that high scores represent high emotional intelligence. The scale demonstrates good construct validity through its relationship with alexithymia (Grieve & Mahar, 2010). The scale has excellent internal consistency (Cronbach's α = .91) (Grieve & Mahar, 2010), and good test-retest reliability (r=.78) (Schutte et al., 1998).

Agreeableness and conscientiousness. Agreeableness and conscientiousness were measured using the relevant subscales of the HEXACO-60 (Ashton & Lee, 2009). In each subscale, participants report their agreement with 10 statements such as "I am usually quite flexible in my opinions when people disagree with me" (agreeableness) and "I always try to be accurate in my work, even at the

expense of time" (conscientiousness)" on a 5-point scale (1=*strongly disagree*, 5=*strongly agree*). Some items are reverse scored, so that higher overall scores represent greater levels of the construct. Reliability for both subscales is good (α = .77 and .78 for agreeableness and conscientiousness respectively). The scales show good concurrent validity, through their moderate positive association (r = .57 and .75) with the relevant subscales of a measure of the Big Five (Ashton & Lee, 2009),

Emotional manipulation.

Emotional manipulation ability. The Emotional Manipulation Ability Scale (Hyde & Grieve, 2014) consists of 10 items from the emotional manipulation factor of Austin et al.'s (2007) measure. Items assess participants' perceived ability to evoke emotions in others for self-interest. A sample item is "I know how to make another person feel uneasy". Responses are made on a 5-point scale ranging from 1=*strongly disagree* to 5=*strongly agree*. High scores represent high levels of emotional manipulation. The scale shows good construct validity, which is demonstrated by its relationship with Machiavellianism. (Austin et al., 2007)   The subscale's internal consistency is excellent (α =.93) (Grieve & Panebianco, 2013).

Emotional manipulation willingness. The Emotional Manipulation Willingness scale (Hyde & Grieve, 2014) consists of 10 items that assess the level of willingness to use emotional skills maliciously. Participants indicate how often they employ manipulative tactics, where 1 = *Never*, 2= *Now and then*, 3 = *Monthly*, 4= *Weekly*, and 5 = *Daily*, for example "How often do you use your emotional abilities to make another person feel uneasy?" The scale has good construct validity demonstrated through its moderate positive relationship (r=.36) with primary psychopathy, as individuals with high levels of primary psychopathy have a propensity to manipulate others (Neumann & Hare, 2008). Internal consistency reliability is very good (α

=.81) (Hyde & Grieve, 2014).

Emotional manipulation strategies: Mood-worsening and inauthenticity.

The Mood-worsening and inauthenticity subscales of the MEOS (Austin &
O'Donnell, 2013) Were used. Thirteen items describe the ability to worsen mood by
evoking negative emotions in others such as shame or anxiety, with the aim of
manipulating their behaviour, such as "I know how to embarrass someone to stop
them from behaving in a particular way". Eleven items assess the use of inauthentic
strategies such as sulking or flattery to manipulate others, for example "I am
especially nice to people whose friendship is advantageous to me". Responses are
made on a 5-point scale with anchors 1 =*strongly disagree* and 5=*strongly agree*.
High scores represent a high use of emotional manipulation strategies. The subscales
show good construct validity (Austin & O'Connell, 2013). Internal reliability has
been shown to be excellent for mood-worsening (α =.91, and α =.83) and
inauthenticity (α =.83 and α=.85) across two samples (Austin et al., 2014).

Autobiographical mood induction.

The mood induction was based on an existing autobiographical Mood
Induction procedure (Baker & Guttfreund,1993). Participants are asked to think for
two minutes about two happy, sad, or neutral events that occurred in their past, then
to write about the events for five minutes.

Mood induction check.

Participants completed The Positive and Negative Affect Scale (PANAS)
(Watson, Clark, & Tellegen, 1988). Ten positive words such as "excited" and
"proud" comprise the positive affect subscale, and 10 negative words such as
"irritable" and "jittery" make up the negative affect subscale. Participants indicate
the extent to which they relate to each word on a scale ranging between 1 and 5,

where 1=*very slightly or not at all* and 5=*extremely*. Higher scores indicate stronger affect. Both the positive affect subscale ($\alpha=.89$) and the negative affect subscale ($\alpha=.85$) have very good internal consistency (Crawford & Henry, 2004). Construct validity of both subscales is demonstrated through relationships with depression, with depression negatively related to the positive subscale ($r = -.48$), and positively related to the negative subscale ($r = .60$).

Two bi-polar visual analogue scales with endpoints reflecting happy and sad mood were included as a secondary mood check. The labels of one scale used faces while the other scale used word labels. Participants mark the point on a line that indicates their current mood state. Horizontal lines were used as they are less prone to error than vertical lines (Dixon & Bird, 1981). Visual analogue scales using both faces and words to communicate mood labels have demonstrated excellent construct validity through strong relationships with measures of dysphoric mood ($r = .81$) (Stern & Bachman, 1991). Low scores represent a happy mood, while high scores represent a sad mood.

Procedure

Ethics approval was granted by the University of Tasmania's Human Research Ethics Committee (Reference number H0015713) (See Appendix B for approval letter). Data was collected at two time points. At Time 1, measures were completed online, while at Time 2 paper questionnaires were completed during a practical class activity. Participants completed the online questionnaire before attending the practical class. Due to timetabling differences, the interval between Time 1 and Time 2 ranged between 1 and 4 days.

Time 1. Students were invited to follow a link to the online survey hosted on SurveyMonkey. Participants read the information sheet (see Appendix C) before

voluntarily consenting to the use of their data for research purposes. Time 1 measures were emotional intelligence, agreeableness, conscientiousness, and emotional manipulation. Data were collected on religion, ethnicity, political orientation and disgust sensitivity, to be used as part of an unrelated study. All scales were presented in the same order. At completion, participants constructed a unique identifier code so that Time 1 and Time 2 data could be matched, while remaining non-identifiable.

Time 2. Time 2 tasks were incorporated during a class activity as part of the emotion and cognition component of the unit. Limited information was disclosed about the mood induction to control for demand characteristics (Orne, 1962). Students and class instructors were blind to participants' assigned mood group.

Following the mood induction, participants completed the measures of emotional manipulation and the mood manipulation checks. Participants were then debriefed as part of in-class discussion. To reverse any residual sad mood, participants listened to a song ("Wake up Boo" by the Boo Radleys, in line with Grieve & Padgett, 2016). Students were advised to take their autobiographical paragraphs with them after the class, to maintain confidentiality and asked not to disclose the details of the activity to those who had not yet attended their own practical class.

Results

Data Screening

There was a small amount of missing data, thus missing data points were estimated using the average of remaining scale items relative to the participant (per Tabachnick & Fidell, 2012). Boxplots revealed one multivariate outlier, which was confirmed as extreme as the relevant scales' standardised residuals were above the

3.29 limit recommended by Tabachnick and Fidell (2012). Inspection of responses

for that case suggested that the participant was consistently endorsing the far lower

end of the response options, indicating a response bias (Christensen, 2004), thus, that

participant's data was removed from the dataset. Casewise diagnostics identified

another consistent outlier (in one Time 1 regression and across three of the four Time

2 regressions). The analyses were run excluding the outlier, and as it was found not

to be an influential case, it was retained for analysis.

Assumption Testing

Assumptions were tested on all overall variables at Time 1. Due to the effect

of mood on scores at Time 2, assumptions were examined on overall Time 2

variables, as well as on those variables as a function of mood where appropriate.

Normality. Histograms of Time 1 data indicated possible floor effects for

mood-worsening and emotional manipulation willingness. This was confirmed by the

standardised skew statistics (S/SE_S) for mood-worsening ($4.16 = p < .001$) and

emotional manipulation willingness ($7.39 = p < .001$) indicating significant

skewness. Emotional intelligence showed a mild negative skew ($-2.11 = p < .05$).

Kurtosis statistics indicated that emotional intelligence was mildly leptokurtic ($2.44

= p < .05$) and willingness was highly leptokurtic ($7.25 = p < .001$). A natural log

transformation of emotional manipulation willingness was undertaken, however the

log of the variable was still significantly skewed. As analyses based on the F

distribution are robust to violations of the assumption of normality (Glass, Peckham,

& Sanders, 1972) the non-transformed variable was used. Inspection of probability

plots in the regression model suggested bivariate normality in all variables, except

for emotional manipulation willingness.

The histograms of Time 2 variables by mood conditions suggested a positive skew in emotional manipulation willingness across all moods. Skew statistics confirmed the positive skew across all variables, as all z scores were greater than 1.96. A mild negative skew was noted in the neutral emotional manipulation willingness group, (-2.88=p<.05). Normality plots within the regression indicated normally distributed errors, except for emotional manipulation willingness that was positively skewed.

Linearity. Screening of bivariate scatterplots indicated linear relationships, as no curvilinear patterns were observed.

Homoscedasticity. The standardised residuals and predicted values plots showed an even distribution of data-points around zero, for all variables except emotional manipulation willingness. The distribution of data-points was suggestive of heteroscedasticity as the data-points were more noticeably more tightly clustered at the negative end of the predicted values.

Multicollinearity. All bivariate correlations between predictor variables were below .8, which indicated a lack of multicollinearity (Tabachnick & Fidell, 2012). This was confirmed as the variance inflation factors (VIF) were below 10 and the Tolerance levels were greater than 0.1 as recommended by Tabachnick and Fidell (2012).

Independence of errors. The Durbin-Watson statistics suggested an absence of autocorrelation as all ds at Time 1(1.77, 1.75, 2.02 and 1.91) and at Time 2 (1.93, 2.19, 1.98, and 1.98) were between the recommended values of 1 and 3.

Preliminary Analyses

Check for systematic differences in Time 1 variables. Although participants were randomly allocated to mood groups, for completeness, one-way

ANOVAs were conducted to test for pre-existing differences in Time 1 variables. A

Bonferroni adjustment was applied to allow for the family-wise error rate (α = .05/7

= .007). Full results of the ANOVAs are presented in Table 1.

Table 1

Means, Standard Deviations, and Internal Reliabilities of Scores at Time 1

Variable	α	*M*	*SD*	95% CI
Emotional intelligence	.89	117.10	13.78	[114.91, 119.30]
Agreeableness	.71	31.81	5.59	[30.92, 32.69]
Conscientiousness	.76	34.80	5.79	[33.88, 35.72]
EM ability	.93	25.30	9.27	[23.82, 26.77]
EM willingness	.80	15.84	4.44	[15.13, 16.54]
Mood-worsening	.93	23.69	9.27	[22.22, 25.17]
Inauthenticity strategy	.88	28.96	7.85	[27.71, 30.21]

Note. CI = confidence interval; EM ability = emotional manipulation ability; EM

willingness = emotional manipulation willingness.

Although the ANOVAs were not statistically significant, emotional

manipulation ability, and mood-worsening showed small-sized effects (Cohen,

1992). The effect sizes of differences between mean scores were examined using

Cohen's *d*. Bonferroni adjusted post hoc multiple comparisons (α = .05) showed that

participants in the happy group reported significantly less emotional manipulation

ability than the neutral group, M_{diff} = -4.47, *SE* = 1.77, *p* = .038, *d* = 0.49, which was

a medium-sized effect. Participants in the happy group also reported less emotional

manipulation ability than those in the sad group. This was not significant, M_{diff} = -

4.10, $SE = 1.79$, $p = .070$, $d = 0.46$, but showed a medium-sized effect. There was no

difference between the neutral and sad groups, $M_{diff} = 0.37$, $SE = 1.84$, $p = 1.00$, $d = 0.06$. Participants in the happy group also reported less mood-worsening strategies

that those in the sad group, $M_{diff} = -4.66$, $SE = 1.79$, $p = .030$, $d = 0.54$ and neutral

group $M_{diff} = -3.88$, $SE = 1.70$, $p = .090$, $d = 0.43$. There was no difference between

the neutral and sad groups, $M_{diff} = -0.79$, $SE = 1.84$, $p = 1.000$, $d = 0.08$. Thus,

although participants were randomly allocated to mood conditions at Time 2, some

pre-existing differences were evident.

Gender differences. A series of Bonferroni adjusted t-tests ($\alpha = .05/7 = .007$)

assessed differences as a function of gender (see Table 2 for complete details).

Males scored significantly higher than females on mood-worsening, this was

medium effect. Although no other comparisons reached significance, the differences

in males and females on emotional manipulation ability produced a medium-sized

effect, and emotional manipulation willingness and conscientiousness resulted in

small-sized effects. Thus, the decision to include gender as a control variable was

prudent.

Table 2

Means and Mean Differences on all Scores According to Gender

	Males (*n* = 27)		Females (*n* = 127)		*t*	*df*	*p*	*M*$_{diff}$	95% CI	*d*
	M	*SD*	*M*	*SD*						
Emotional intelligence	118.70	14.99	116.76	(13.55)	0.66	152	.508	1.94	[-3.84, 7.72]	0.12
Agreeableness	32.26	6.00	31.70	(5.52)	0.46	152	.643	0.55	[-1.79, 2.90]	0.10
Conscientiousness	33.11	5.63	35.16	(5.79)	-1.68	152	.096	-2.05	[-4.45, 0.37]	0.35
EM ability	28.37	9.41	24.65	(9.14)	1.91	152	.058	3.72	[-0.12, 7.57]	0.40
EM willingness	16.74	4.90	15.65	(4.33)	1.66	152	.246	1.10	[-0.76, 2.95]	0.25
Mood-worsening	28.26	10.72	22.72	(8.68)	2.88	152	.005	5.53	[1.74, 9.33]	0.61
Inauthenticity strategy	28.63	6.71	29.03	(8.09)	-0.24	152	.810	-0.40	[-3.70, 2.89]	0.05

Note. CI = confidence interval; EM ability = emotional manipulation ability; EM willingness = emotional manipulation willingness.

α =.007 (.05/7) to control the family-wise error rate.

Mood Induction Check

A series of one-way ANOVAs was conducted on the positive and negative PANAS scales, and on both visual analogue scales. Ryan-Einot-Welsch post hoc tests ($\alpha = .05$) examined differences in scores between mood conditions. (See Table 3 for means).

Table 3

Means and Standard Deviations of Mood Measures According to Mood Group

Variable	Happy (*n* = 56)			Neutral (*n* = 50)			Sad (*n* = 48)		
	M	*SD*	95% CI	*M*	*SD*	95% CI	*M*	*SD*	95% CI
Positive PANAS	25.02	7.84	[22.73, 27.08]	24.62	6.67	[22.72, 26.51]	20.90	7.00	[18.86, 22.93]
Negative PANAS	14.84	6.91	[13.09, 16.92]	15.24	4.99	[13.82, 16.66]	17.15	6.43	[15.28, 19.01]
Face VAS	51.75	30.70	[44.29,61.11]	51.88	25.95	[44.51, 59.25]	72.44	29.79	[63.79, 81.09]
Word VAS	47.11	30.66	[38.74, 55.48]	50.90	27.09	[43.20, 58.59]	73.96	32.33	[64.57, 83.35]

Note. CI = confidence interval; PANAS = Positive and Negative Affect Scale; VAS = visual analogue scale.

There was a significant difference on the positive PANAS scores, $F(2, 151) = 4.95$, $p=.008$. Scores in the sad group were lower than the happy, $d = 0.55$ and the neutral groups, $d = 0.55$, while the happy and neutral groups did not differ, $d = 0.05$. There were no differences in negative PANAS scores, $F(2, 151)=1.99$, $p=.14$. The difference between the happy and sad groups showed a small-sized effect, $d = .34$, between the neutral and sad groups showed a small-sized effect $d =0.33$, while the difference between the happy and neutral groups was trivial.

There was a difference between groups on the face VAS scores, $F(2, 151) = 8.37$, $p < .001$. The happy and neutral groups' scores were significantly lower than the sad group, ds $= 0.68$ and 0.73 respectively which represent medium effect sizes. However, the happy and neutral groups scores did not differ, $d = 0.01$.

There was also a difference in the word VAS scale scores, $F(1,149) = 11.56$, $p < .001$. The happy group and neutral group scores were significantly lower than the sad group, ds $= 0.85$ and 0.77 respectively, which represent large effect sizes. However, the happy and neutral groups scores did not differ, $d = 0.13$.

Descriptive Statistics

Means, standard deviations and internal reliabilities (Cronbach's α) of variables measured at Times 1 and 2 are presented in Tables 4 and 5 respectively. Participants reported similar levels of agreeableness and conscientiousness as reported by Grieve (2011). Inauthentic strategy, emotional manipulation ability and emotional intelligence were also comparable to existing research, though emotional manipulation willingness and mood-worsening means were both slightly lower than those reported previously (Austin et al., 2014; Hyde & Grieve, 2014; O'Connor & Athota, 2013).

Table 4

Means, Standard Deviations, and Internal Consistency Reliabilities of Scores at Time 1 as a Function of Mood

Variable	Happy (*n* = 56)			Neutral (*n* = 50)			Sad (*n* = 48)		
	M	*SD*	95%CI	*M*	*SD*	95%CI	*M*	*SD*	95%CI
Emotional intelligence	118.77	13.49	[115.16,122.38]	116.62	13.88	[112.67,120.56]	115.67	14.10	[111.57,119.76]
Agreeableness	32.64	5.24	[31.24, 34.05]	31.34	5.45	[29.79, 32.89]	31.31	6.09	[29.54, 33.08]
Conscientiousness	35.15	6.09	[33.51, 36.77]	34.42	5.90	[32.74, 36.10]	34.79	5.41	[33.22, 36.36]
EM ability	22.57	8.99	[20.16, 24.98]	27.04	9.29	[24.40, 29.68]	26.67	9.00	[24.05, 29.28]
EM willingness	15.50	4.64	[14.26, 16.74]	16.34	4.61	[15.03, 17.65]	15.71	4.06	[14.53, 16.89]
Mood-worsening	20.98	8.09	[18.82, 23.15]	24.86	9.85	[22.06, 27.66]	25.64	9.39	[22.92, 28.37]
Inauthenticity strategy	28.14	8.79	[25.79, 30.49]	29.58	6.91	[27.62, 31.54]	29.27	7.69	[27.03, 31.50]

Note. CI = confidence interval; EM ability = emotional manipulation ability; EM willingness = emotional manipulation willingness.

Table 5

Means, Standard Deviations, and Internal Consistency Reliabilities of Scores at Time 2 as a Function of Mood

Variable	Happy (*n* = 56)			Neutral (*n* = 50)			Sad (*n* = 48)		
	M	*SD*	95%CI	*M*	*SD*	95%CI	*M*	*SD*	95%CI
EM ability	25.11	8.95	[22.71, 27.50]	29.48	9.29	[27.52, 31.44]	29.08	7.57	[26.89, 31.28]
EM willingness	16.02	4.13	[14.91, 17.12]	17.60	4.96	[16.19, 19.01]	17.17	4.44	[15.88, 18.46]
Mood-worsening	24.25	9.22	[21.78, 26.72]	28.54	8.15	[26.22, 30.86]	27.85	9.39	[25.13, 30.58]
Inauthenticity	25.77	8.13	[23.58, 27.94]	29.08	7.50	[26.95, 31.21]	28.20	8.38	[25.77, 30.64]

Note. CI = confidence interval; EM ability = emotional manipulation ability; EM willingness = emotional manipulation willingness.

Internal consistency reliabilities (Cronbach's α) of emotional intelligence, emotional manipulation ability, inauthentic strategy and mood-worsening at Time 1 were very good (Cronbach, 1951), and comparable to previous findings (O'Connor & Athota, 2013; Grieve & Mahar, 2010; Grieve, 2001; Austin & O'Donnell, 2013; Austin et al., 2014). Conscientiousness and emotional manipulation willingness both showed good internal consistency, aligning with findings by Ashton and Lee (2009) and Grieve respectively (2011). The internal reliability of the Agreeableness subscale was good but lower than reported by Grieve (2011).

Bivariate correlations. The correlation matrix is presented in Table 5. Emotional Intelligence showed no bivariate relationship with emotional manipulation ability or willingness in line with Hyde and Grieve (2014). It was also not related to inauthentic strategy or mood-worsening; findings that were inconsistent with previous research reporting weak negative associations (Austin et al., 2014; O'Connor & Athota, 2013). All measures of emotional manipulation showed moderate and strong relationships with each other.

Table 6

Bivariate Correlations of all Variables Measured at Time 1

	1	2	3	4	5	6	7
1. Emotional intelligence	-						
2. Agreeableness	.22*	-					
3. Conscientiousness	.24*	-.03	-				
4. EM ability	.08	-.34**	-.21*	-			
5. EM willingness	-.05	-.36**	-.11	.63**	-		
6. Mood-worsening	-.16	-.48**	-.21*	.66**	.66**	-	
7. Inauthenticity strategy	-.02	-.35**	-.04	.47**	.57**	.47**	-

Note. EM Ability = emotional manipulation ability; EM Willingness = emotional manipulation willingness.

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

Inferential Statistics: Agreeableness, Conscientiousness, and Emotional

Intelligence as Predictors of Emotional Manipulation

All effect sizes are interpreted in line with Cohen (1992). Tables 7, 8, 9, and 10 contain the results of the two step hierarchical multiple regression analysis predicting emotional manipulation ability, willingness, mood-worsening and inauthenticity strategies respectively.

Emotional manipulation ability. In step one, gender accounted for 1.7% of variance of emotional manipulation ability. This was significant amount, $R = .15$, adjusted $R^2 = .071$, $F(1,152) = 3.66$, $p = .058$, and showed a small effect $f^2 = 0 .02$.

Including agreeableness, conscientiousness and emotional intelligence in the second step explained an additional 19.8% of variance, adjusted $\Delta R^2 = .20$, $F\Delta = (3, 149) = 12.67$, $p < .001$, which was a significant improvement. The model, explained 22.2% of variance, $R = .47$, adjusted $R^2 = .20$, $F(4,149) = 10.63$, $p < .001$, $f^2 = 0.28$, suggesting a large-sized effect. Within the model, being more emotionally intelligent, and less agreeable and less conscientious predicted emotional manipulation ability.

Emotional manipulation willingness. Gender accounted for a non-significant 0.9% of variance of emotional manipulation willingness, $R = .09$, adjusted $R^2 = .002$, $F(1, 152) = 1.36$, $p = .246$, $f^2 = 0 .01$, a small effect. The addition of agreeableness, conscientiousness and emotional intelligence in the second step significantly improved the model and explained 15.1% of additional variance, $\Delta R^2 = .15$, $F\Delta = (3,149) = 8.92$, $p < .00$,. The final model explained 16.0% of variance, which was significant, $R = .40$, $F(4,149) = 7.08$, $p < .001$, $f^2 = 0.19$, and indicated a large-sized effect. Being less agreeable predicted emotional manipulation willingness.

Table 7

Multiple Hierarchical Regression Results Predicting Emotional Manipulation Ability at Time 1

Model		B	SE	Beta	t	p	95% CI for B
Step 1	Constant	32.09	3.63	-	8.84	<.001	[24.92, 39.27]
	Gender	-3.73	1.95	-.15	-1.91	0.058	[-7.53, 0.12]
Step 2	Constant	48.56	7.67	-	6.33	<.001	[33.40, 63.71]
	Gender	-2.97	1.78	-.12	-1.67	.097	[0.05, 0.25]
	Emotional intelligence	0.15	0.05	.22	2.85	.005	[0.04, 0.25]
	Agreeableness	-0.66	0.12	-.40	-5.34	<.001	[-0.90, -0.42]
	Conscientiousness	-0.41	0.12	-.25	-3.36	<.001	[-0.64, -0.17]

Note. CI = confidence interval.

Table 8

Multiple Hierarchical Regression Results Predicting Emotional Manipulation Willingness at Time 1

Model		B	SE	Beta	t	p	95% CI for B
Step 1	Constant	17.86	1.75	-	10.18	<.001	[14.37, 21.30]
	Gender	-1.10	0.94	-.09	-1.17	.246	[-0.25, 0.76]
Step 2	Constant	28.58	3.81	-	7.49	<.001	[21.04, 36.13]
	Gender	-1.03	0.89	-.09	-1.62	.247	[-2.78, 0.72]
	Emotional intelligence	0.01	0.03	.06	0.73	.463	[-0.03, 0.07]
	Agreeableness	-0.31	0.06	-.39	-4.98	<.001	[-0.43, -0.18]
	Conscientiousness	-0.10	0.06	-.13	-1.61	.111	[-0.21, 0.02]

Note. CI = confidence interval.

Mood-worsening strategy. The entry of gender at Step 1 resulted in a significant model, $R = .23$, adjusted $R^2 = .046$, $F(1, 152) = 8.32$, $p = .005$, $f^2 = 0.05$, and accounted for 5.2% of variance of mood-worsening, which was a small effect. Being male predicted mood-worsening. The addition of the remaining variables in Step 2 accounted for an additional 27.9% of variance, which was significant, $\Delta R^2 = .27$, $F\Delta = (3,149) = 20.68$, $p < .001$. With all variables entered, a significant and large effect was evident ($f^2 = 0.49$), with 33.1% of variance accounted for, $R = .58$, adjusted $R^2 = .313$, $F(4,149) = 8.32$, $p < .001$. Being male, less agreeable and less conscientious significantly predicted mood-worsening.

Inauthentic strategy. The first step was not significant, $R = .02$, adjusted $R^2 = .006$, $F(1, 152) = 0.06$, $p = .810$. Only 0.01% of variance was explained by gender. This was a very small effect size, $f^2 = 0.001$. Adding agreeableness, conscientiousness and emotional intelligence at Step 2 resulted in an additional 13.7% of variance explained, which was a significant improvement, $\Delta R^2 = .11$, $F\Delta = (3, 149) = 7.89$, $p < .001$. The final model explained 13.7% of variance in inauthentic strategy use, and was significant, $R = .37$, $F(4, 149) = 5.93$), $p < .001$, $f^2 = 0.16$, a medium-sized effect. Being less agreeable significantly predicted inauthentic strategy.

Table 9

Multiple Hierarchical Regression Results Predicting Mood-Worsening at Time 1

Model		*B*	*SE*	Beta	*t*	*p*	95% CI for *B*
Step 1	Constant	33.79	3.58	-	9.45	<.001	[26.72, 40.86]
	Gender	-5.54	1.92	-.23	-2.88	.005	[-9.33, 1.74]
Step 2	Constant	71.28	7.12	-	10.02	<.001	[57.22, 85.34]
	Gender	-5.38	1.65	-.22	-3.26	001	[-8.65, -2.21]
	Emotional intelligence	-0.01	-.05	-.01	-0.20	.814	[-0.10, 0.08]
	Agreeableness	-0.82	.11	-.49	-7.16	<.001	[-1.05, -0.59]
	Conscientiousness	-0.30	.11	-.19	-2.71	.008	[-0.53, -0.08]

Note. CI = confidence interval.

Table 10

Multiple Hierarchical Regression Results Predicting Inauthenticity Strategy at Time 1

Model		*B*	*SE*	Beta	*t*	*p*	95% CI for *B*
Step 1	Constant	28.23	3.11	-	9.08	<.001	[22.09, 34.37]
	Gender	0.40	1.67	.02	0.24	.810	[-2.89, 3.70]
Step 2	Constant	40.69	6.84	-	5.95	<.001	[27.18, 54.20]
	Gender	0.47	1.59	.02	0.29	.769	[-2.67, 3.60]
	Emotional intelligence	.07	0.05	.12	1.50	.137	[-0.02, 0.16]
	Agreeableness	0.53	0.11	-.38	-4.82	<001	[-0.75, -0.31]
	Conscientiousness	-0.11	0.11	-.08	-1.01	.315	[-0.32, 0.10]

Note. CI = confidence interval.

Inferential Statistics: The Role of Mood in Emotional Manipulation

Results for the hierarchical multiple regression analyses predicting emotional manipulation ability, willingness, mood-worsening strategies and inauthentic strategies are presented in Tables 11, 12, 13, and 14, respectively. For all analyses, gender was entered in Step 1, the relevant Time 1 emotional manipulation variable was entered at Step 2, agreeableness, conscientiousness and emotional manipulation were entered in Step 3, and mood (dummy coded) at Step 4. Effect sizes were interpreted following Cohen's (1992) guidelines.

Emotional manipulation ability In step one, gender significantly accounted for 3.6% of variance, $R = .19$, adjusted $R^2 = .020$, $F(1,152) = 5.62$, $p = .019$, $f^2 = 0.04$, which represents a small effect. Being male predicted emotional manipulation ability. In Step 2, including emotional manipulation ability from Time 1 accounted for an additional 59.1% of variance, $\Delta R^2 = .59$, $F\Delta = (1,151) = 238.70$, $p < .001$, which was a significant improvement, with the model at Step 2 explaining 62.2% of variance, $R = .79$, adjusted $R^2 = .62$, $F(2, 151) = 126.55$, $p < .001$, $f^2 = 1.67$, indicating a very large effect. Greater emotional manipulation ability at Time 1 predicted greater emotional manipulation ability at Time 2. Adding the emotional intelligence and personality variables at Step 3 resulted in a significant improvement, $\Delta R^2 = .02$, $F\Delta = (3,148) = 3.26$, $p = .023$, although only an additional 2.3% of variance in emotional manipulation ability was explained. Overall, 64.9% of variance was explained, which was significant, $R = .81$, adjusted $R^2 = .64$, $F(5, 148) = 23.81$, $p < .001$, $f^2 = 1.66$, indicating a very large effect size. Within this model, having higher emotional intelligence, and being less agreeable predicted emotional manipulation ability.

Mood was entered in the final step, and accounted for an additional 0.6% of variance, $\Delta R^2 = .64$, $F\Delta = (2, 146) = 1.29$, $p = .278$. Within this final model, 65.6% of variance was explained, which was significant, $R = .81$, adjusted $R^2 = .64$, $F(7, 146), = 39.70$, $p < .001$, $f^2 = .54$, indicating a medium-sized effect. Being less agreeable was the only significant individual predictor.

Emotional manipulation willingness. Step 1 was not significant, $R = .08$, adjusted $R^2 = -.001$, $F(1,152) = 5.62$, $p = .352$. Gender accounted for 0.6% of variance in emotional manipulation willingness. Adding Time 1 emotional manipulation willingness accounted for an additional 50.3% of variance, $\Delta R^2 = .50$, $F\Delta = (1,151) = 154.33$, $p < .001$, which was a significant improvement. This model was significant, $F(2, 151) = 126.55$, $p < .001$, with 50.8% of variance explained, $R = .71$, adjusted $R^2 = .50$, $f^2 = 1.03$. This was a very large effect. Emotional manipulation willingness at Time 1 predicted emotional manipulation willingness at Time 2. The addition of agreeableness, conscientiousness and emotional intelligence in the third step accounted for an additional 0.30% of variance; this was not a significant improvement $\Delta R^2 = .003$, $F\Delta = (3,148) = .35$, $p = .787$. The model was significant and explained 51.2% of variance, $R = .72$, adjusted $R^2 = .50$, $F(5, 148) = 31.03$, $p < .001$, $f^2 = 1.05$, suggesting a very large effect. Emotional manipulation willingness at Time 1 was the only significant individual predictor.

The addition of mood at Step 4 explained an additional 1.1% of variance, $\Delta R^2 = .01$, $F\Delta = (2, 146) = 1.67$, $p = .191$. The final model was significant, $F(7, 146), = 22.84$, $p < .001$. A very large effect was evident, $f^2 = 1.11$, with the model explaining 52.3% of variance, $R = .72$, adjusted $R^2 = .50$. Only Time 1 emotional manipulation willingness predicted emotional manipulation willingness at Time 2.

Table11

Multiple Hierarchical Regression Results Predicting Emotional Manipulation Ability from Emotional Intelligence, Agreeableness,

Conscientiousness, and Mood

Model		*B*	*SE*	Beta	*t*	*p*	95% CI for *B*
Step 1	Constant	35.09	3.15	-	11.12	<.001	[28.85, 41.32]
	Gender	-4.01	1.69	-.19	-2.37	.019	[-7.36, -0.67]
Step 2	Constant	13.26	2.42	-	5.47	<.001	[8.47, 18.05]
	Gender	-1.47	1.07	-.07	-1.38	.169	[-3.59, 0.64]
	EM ability (Time 1)	0.68	0.04	.78	15.45	<.001	[0.59, 0.76]
Step 3	Constant	9.34	5.08	-	1.84	.068	[-0.71, 19.40
	Gender	-1.64	1.06	-.08	-1.55	.123	[-3.73, 0.45]
	EM ability (Time 1)	0.64	0.05	.76	13.33	<.001	[0.55, 0.74]
	Emotional Intelligence	0.08	0.03	.12	2.41	.017	[0.01, 0.14]
	Agreeableness	-0.16	0.08	-.11	-2.00	.047	[-0.31, -.002]

	Conscientiousness	0.04	0.07	.03	0.54	.587	[-0.19, 0.19]
Step 4	Constant	9.39	5.11	-	1.84	.068	[-0.72, 19.49]
	Gender	-1.45	1.06	-.07	-1.34	.176	[-3.55, 0.65]
	EM ability (Time 1)	0.63	0.05	.72	12.78	<.001	[0.53, 0.73]
	Emotional intelligence	0.08	0.03	.14	2.57	.011	[0.02, 0.14]
	Agreeableness	-0.16	0.08	-.11	-1.98	.050	[-0.31, 0.00]
	Conscientiousness	0.04	0.77	.02	0.44	.630	[-0.11, 0.18]
	Sad	-0.15	0.99	-.01	-0.15	.883	[-2.09, 1.80]
	Happy	-1.43	0.97	-.08	-1.47	.145	[-3.35, 0.50]

Note. CI = confidence interval; EM ability = emotional manipulation ability.

Table 12

Multiple Hierarchical Regression Results Predicting Emotional Manipulation Willingness from Emotional Intelligence, Agreeableness,

Conscientiousness, and Mood

Model		B	SE	Beta	t	p	95% CI for B
Step 1	Constant	18.52	1.79	-	10.34	<.001	[14.99, 22.07]
	Gender	-0.90	0.96	-.08	-0.93	.352	[-2.80, 1.00]
Step 2	Constant	5.56	1.64	-	3.40	.001	[2.33, 8.80]
	Gender	-0.10	0.68	-.01	-0.15	.882	[-1.45, 1.24]
	EM willingness (Time 1)	0.73	0.06	.71	12.42	<.001	[0.61, 0.84]
Step 3	Constant	6.11	3.50	-	1.75	.082	[-0.80, 13.02]
	Gender	-0.06	0.70	-.01	-0.09	.931	[-1.43, 1.31]
	EM willingness (Time 1)	0.71	0.06	.69	11.07	<.001	[0.58, 0.83]
	Emotional intelligence	0.02	0.02	.05	0.78	.437	[-0.02, -0.05]
	Agreeableness	-0.04	0.05	-.48	-0.76	.448	[-0.14, 0.06]

	Conscientiousness	-0.03	0.05	-.33	-.-0.55	.583	[-0.12, 0.07]
Step 4	Constant	5.50	3.53	-	1.56	.121	[-1.48, 12.48]
	Gender	0.12	0.70	.01	0.17	.863	[-1.26, 1.50]
	EM willingness (Time 1)	0.71	0.64	.69	11.10	<.001	[0.58, 0.83]
	Emotional intelligence	0.02	0.02	.06	0.91	.363	[-0.21, .06]
	Agreeableness	-0.03	0.05	-.04	-0.59	.558	[-0.13, 0.07]
	Conscientiousness	-0.03	0.05	-.03	-0.53	.594	[-.012, 0.07]
	Sad	0.04	0.65	.004	0.07	.947	[-1.24, 1.33]
	Happy	-0.98	0.63	-.10	-1.55	.123	[-2.23, 0.27]

Note. CI = confidence interval; EM willingness = emotional manipulation willingness.

Mood-worsening strategy. In step one, gender accounted for 1.9% of variance of mood-worsening which was not significant, $R = .14$, adjusted $R^2 = -.46$, $F(1,152) = 2.96$, $p = .087$, $f^2 = 0.02$ (a small effect). When Time 1 mood-worsening was added in the second step, it explained an additional 46.4% of variance, $\Delta R^2 = .45$, $F\Delta = (1,151) = 125.32$, $p < .001$, significantly improving the model, accounting for 54.0% of variance, $R = .73$, adjusted $R^2 = .52$, which was significant model, $F(2, 151) = 65.35$, $p < .001$, and reflected a very large effect $f^2 = 1.31$. Mood-worsening at Time 1 predicted mood-worsening at Time 2. The addition of emotional intelligence, agreeableness and conscientiousness at Step 3 significantly improved the model, $\Delta R^2 = .08$, $F\Delta = (3,148) = 8.11$, $p < .001$, explaining an additional 7.6% of variance which was a significant amount. This model explained 54.0% of variance in mood-worsening, and was significant, $R = .74$, adjusted $R^2 = .52$, $F(5, 148) = 34.69$, $p < .001$, $f^2 = 1.17$, a very large effect. Having high levels of mood-worsening, high emotional intelligence and being less agreeable predicted emotional manipulation ability.

Including moods did not significantly improve the model, $\Delta R^2 = .006$, $F\Delta = (2, 146) = 1.03$, $p = .361$, with only an additional 0.6% of variance explained. The final model was significant explaining 54.6% of variance in mood worsening, $R = .74$, adjusted $R^2 = .52$, $F(7, 146), = 25.08$, $p < .001$, $f^2 = 0.83$, indicating a very large effect. Mood worsening at Time 1, being emotionally intelligent and high in agreeableness predicted mood-worsening at Time 2.

Table 13

Multiple Hierarchical Regression Results Predicting Mood-Worsening from Emotional Intelligence, Agreeableness, Conscientiousness, and

Mood

Model		B	SE	Beta	t	p	95% CI for B
Step 1	Constant	32.77	3.57	-	9.19	<.001	[25.75, 39.82]
	Gender	-3.29	1.91	-.14	-1.72	.087	[-7.07, 0.50]
Step 2	Constant	10.08	3.33	-	3.02	.003	[3.49, 16.67]
	Gender	0.42	1.45	.02	0.29	.771	[-2.46, 3.31
	Mood-worsening (Time 1)	0.67	0.06	.69	11.20	<.001	[0.55, 0.79]
Step 3	Constant	20.13	7.51	-	2.68	.008	[5.29, 34.97]
	Gender	-0.31	1.39	-.01	0.22	.823	[-3.07, 2.44]
	Mood-worsening (Time 1)	0.54	0.07	.59	8.06	<.001	[0.41, 0.67]
	Emotional intelligence	0.10	0.04	.15	2.52	.013	[0.02, 0.17]
	Agreeableness	-0.49	0.11	-.30	-4.57	<.001	[-0.71, -0.28]

	Conscientiousness	-0.04	0.09	-.03	-0.42	.675	[-0.22, 0.15]
Step 4	Constant	20.73	7.53	-	2.75	.007	[5.84, 33.60]
	Gender	-0.18	1.40	-.01	-0.13	.898	[-2.95, 2.59]
	Mood-worsening (Time 1)	0.53	0.07	.54	7.80	<.001	[0.39, 0.66]
	Emotional intelligence	0.10	0.04	.15	2.57	.011	[0.02, 0.18]
	Agreeableness	-0.49	0.11	-.30	-4.53	<.001	[-0.71, -0.28]
	Conscientiousness	-0.04	0.09	-.03	-0.41	.682	[-0.22, 0.15]
	Sad	-1.01	1.27	-.05	-0.80	.428	[-3.52, 1.50]
	Happy	-1.78	1.24	-.09	-1.43	.156	[-4.23, 0.68]

Note. CI = confidence interval.

Inauthentic strategy. Gender had a trivial, non-significant effect at Step 1 (f^2 = 0.001), accounting for 0.1% of variance., R = .03, adjusted R^2 = -.006, $F(1,152)$ = 0.128, p = .721, , The inclusion of Time 1 inauthentic strategy accounted for an additional 65.4% of variance, ΔR^2 = .65, $F\Delta$ = (1,151) = 286.72, p < .001, which was a significant improvement. The model, explained 65.5% of variance, R = .81, adjusted R^2 = .65, $F(2, 151)$ = 143.55, p < .001, f^2 =1.92, indicating a very large effect. Inauthentic strategy at Time 1 predicted inauthentic strategy at Time 2.

Adding agreeableness, conscientiousness and emotional intelligence in the third step did not significantly improve the model, accounting for an additional 0.8% of variance, ΔR^2 = .008, $F\Delta$ = (3,148) = 0.35, p < .001. The overall model explained 66.3% of variance which was significant, R = .81, adjusted R^2 = .61, $F(5, 148)$ = 58.20, p < .001, f^2 =1.97, indicating a very large effect. Time 1 scores on inauthentic strategy predicted inauthentic strategy at Time 2.

Mood was added at the final step, explaining an additional 1.0% of variance, which was not a significant improvement, ΔR^2 = .010, $F\Delta$ =(2, 146) = 2.28, p = .106. The final model was significant and explained 67.3% of variance R = .82, adjusted R^2 = .66, $F(7, 146)$, = 42.93, p < .001, f^2 = 2.06, indicating a very large-sized effect. Scores of inauthentic strategy at Time 1, and being in a negative mood predicted inauthentic strategy.

Table 14

Multiple Hierarchical Regression Results Predicting Inauthenticity from Emotional Intelligence, Agreeableness, Conscientiousness, and Mood

Model		B	SE	Beta	t	p	95% CI for B
Step 1	Constant	28.73	3.21	-	8.96	<.001	[22.39, 35.06]
	Gender	-0.62	1.72	-.03	-0.36	.721	[-4.01, 2.78]
Step 2	Constant	5.18	2.35	-	2.21	.029	[0.54, 9.81]
	Gender	-0.95	1.01	-.05	-0.94	.350	[-2.59, 1.05]
	Inauthenticity (Time 1)	0.83	0.05	.81	16.93	<.001	[0.74, 0.93]
Step 3	Constant	9.97	4.92	-	2.03	.044	[0.25, 19.69]
	Gender	-1.13	1.03	-.05	-1.10	.271	[-3.16, 0.90]
	Inauthenticity (Time 1)	0.81	0.05	.79	15.28	<.001	[0.71, 0.91]
	Emotional Intelligence	-0.02	0.03	-.03	-0.58	.561	[-0.08, 0.04]
	Agreeableness	-0.11	0.08	-.07	-1.40	.164	[-0.26, 0.04]
	Conscientiousness	0.05	0.07	.04	0.70	.488	[-0.09, 0.19]

Step 4	Constant	9.66	4.93	-	1.96	.052	[-0.07, 19.40]
	Gender	-0.87	1.03	-.04	-0.84	.401	[-2.90, 1.17]
	Inauthenticity (Time 1)	0.80	0.05	.78	15.28	<.001	[0.70, 0.91]
	Emotional intelligence	-0.01	0.03	-.02	-0.46	.648	[-0.07, 0.04]
	Agreeableness	-0.10	0.08	-.07	-1.25	.212	[-0.25, 0.06]
	Conscientiousness	0.05	0.07	.04	0.74	.459	[-0.09, 0.19]
	Sad	-0.68	0.96	-.04	-0.71	.477	[-2.58, 1.21]
	Happy	-1.96	0.93	-.12	-2.10	.038	[-3.81, -0.11]

Note. CI = confidence interval.

Discussion

The current study aimed to examine the combined predictive utility of emotional intelligence, agreeableness, and conscientiousness on emotional manipulation. Further, this study also investigated the influence of mood on emotional manipulation. With a view to completeness, emotional manipulation was operationalised in terms of self-reported ability and willingness as well as inauthentic and mood-worsening strategies. The effect of emotional intelligence, agreeableness, and conscientiousness on emotional manipulation was considered using the cross-sectional data collected from Time 1. The effect of mood was tested following a mood induction administered prior to the completion of the emotional manipulation variables at Time 2.

Assessing the Role of Emotional Intelligence, Agreeableness, and Conscientiousness on Emotional Manipulation

The first hypothesis, that together, emotional intelligence, agreeableness, and conscientiousness would predict emotional manipulation was supported. The linear combination of those variables explained an adjusted 20.1%, 13.7%, 31.3%, and 11.4% of variance in emotional manipulation ability, willingness, and mood-worsening and inauthentic strategies, respectively. Thus, the second hypothesis that emotional intelligence, agreeableness and conscientiousness would explain a larger amount of variance in emotional manipulation when measured by mood-worsening and inauthentic strategy received partial support. While the model for mood-worsening strategies showed a large effect (interpreted in line with Cohen, 1992), the effect sizes for willingness and inauthenticity were moderate, and the effect size for ability was moderate to large.

The hypothesis that emotional intelligence would significantly contribute to emotional manipulation within these models was supported only for emotional manipulation ability, with emotional intelligence acting as a significant positive predictor. In line with the fourth hypothesis, agreeableness was a significant negative predictor for emotional manipulation ability, willingness, and mood-worsening and inauthentic strategies. However, the prediction that conscientiousness would also significantly contribute to the models at Time 1 was only partially supported: conscientiousness was a significant, negative, individual predictor for emotional manipulation ability and with mood-worsening only.

This was the first study to consider the combination of EI, agreeableness, and conscientiousness in predicting emotional manipulation. Austin et al. (2007) sought to identify the "dark" side of emotional ability through the relationship between emotional intelligence and emotional manipulation. However, no relationship was found. In noting that agreeableness was positively related to emotional intelligence, and negatively related to emotional manipulation, they suggested that being agreeable could account for the pro-social aspect of emotional ability use, thereby decreasing the likelihood of emotionally manipulating others. Consequently, O'Connor and Athota (2013) investigated the role of agreeableness in the emotional intelligence and emotional manipulation relationship. However, as they identified both mediating and moderating effects of agreeableness, the exact role that agreeableness plays in the relationship is unclear. Grieve (2011) examined the combined roles of personality and self-monitoring in predicting emotional manipulation, and noted that high agreeableness and high conscientiousness predicted emotional manipulation. The overall results of those studies align with

our findings that emotional intelligence, agreeableness and conscientiousness together contribute to emotional manipulation.

The overall contribution of the combination of emotional intelligence, agreeableness, and conscientiousness was greater in relation to mood-worsening than it was in relation to emotional manipulation ability. This aligns with findings by Austin et al. (2014) who noted that the bivariate relationships between both agreeableness and conscientiousness were stronger with mood-worsening than they were with inauthentic. Interestingly, emotional intelligence, agreeableness and conscientiousness together contributed less to the use of inauthenticity strategies than they did to emotional manipulation ability. Perhaps using inauthentic displays involve acting skills rather than emotional skills.

Within the models, emotional intelligence was only a significant predictor of emotional manipulation ability, however as predicted the relationship was positive, suggesting that emotional abilities can be used both pro-socially as well as maliciously. However, this finding could be due to the suppressor effect of emotional intelligence absorbing its shared variance with agreeableness and conscientiousness. The suppressor effects of emotional intelligence were previously found by Grieve and Mahar (2010) and Grieve and Panebianco (2013), who found that emotional intelligence and psychopathic traits together predicted emotional manipulation. Interestingly, emotional intelligence acted as suppressor alongside both maladaptive traits (Grieve & Mahar, 2010; Grieve & Panebianco, 2013) and pro-social traits, as found in the current study. This suggests that emotional intelligence plays a role in emotional manipulation, however the nature of this role is unclear. Future research could investigate whether its apparent involvement is due to the pro-social nature of emotional intelligence itself, or the nature of self-report

measures, as it may be that people overestimate their ability to engage in emotional manipulation. However, the difficulties of developing a performance measure of emotional manipulation are similar to the issues of performance measures of emotional intelligence (Schlegel, 2016).

It is not clear why conscientiousness did not more consistently predict emotional manipulation. It could be that a pro-social nature, which was shown to strongly predict emotional manipulation through agreeableness, is not as dominant in conscientiousness. It could be that conscientious people are reliable in respect to themselves more than to others, thus indicating that it may be less involved in managing other people's emotions the conceptualised.

The Effect of Mood

The hypothesis that mood would significantly contribute to emotional manipulation in addition to the contributions made by emotional intelligence, agreeableness and conscientiousness was supported only for inauthentic emotional manipulation strategies. In that analysis, a more positive mood was significantly associated with a lower use of emotional inauthenticity. The predictions that mood would influence emotional manipulation ability, willingness, and mood-worsening strategies were not supported.

It is unclear why mood contributed solely to inauthenticity, and not to the remaining emotional manipulation measures. Forgas (2001) suggested that mood primes mood congruent behaviour, Affective priming suggests that a negative mood should increase the likelihood of self-serving tendencies, as according to network models of memory (Collins and Loftus, 1975) mood would activate mood congruent behaviours, however this appeared not to be the case in the current study.

A satisfactory explanation would be that emotional intelligence allowed individuals in the experimentally manipulated mood conditions to regulate and manage their moods, thus inhibiting the potential effect of mood on emotional manipulation. These mechanisms would align clearly with conceptualisations of emotional intelligence (i.e. the ability to identify, regulate, and manage emotions, (Mayer & Salovey, 1997).

Specifically, in line with the proposed explanation that emotional intelligence restrains mood, EI only contributed significantly to emotional manipulation ability and to mood-worsening strategies. In support of this, inspection of the bivariate correlations reveals that EI is acting unambiguously as a statistical suppressor in the case of mood-worsening, and to emotional manipulation ability. Nonetheless, it is difficult to explain why this effect might be evident for only two of the four aspects of emotional manipulation investigated here.

Another consideration in regards to the lack of effect of mood is the nature of the participants in the three mood conditions. Participants were randomly assigned to mood conditions, to less the chance of pre-existing differences between the groups. However, in the current study, it is possible that people with lower emotional manipulation ability and mood-worsening were allocated to the happy group, as the results suggest that the scores of that group was lower than the sad group. This potentially represents a problem for the current study. If people who are less manipulative are allocated to a group in which a happy mood is predicted to decrease reported manipulative behaviour, the hypothesised outcome is not likely to be elicited, due to the restriction of range that would emerge from floor effects (Christensen, 2004)

The lack of findings in regards to mood could also be explained by referring to the mood induction. It is inconclusive whether the mood induction was successful. Scores on the negative PANAS did not differ between groups, however the scores of the visual analogue scales indicated that the happy group were in a more positive mood than the sad group, and the finding was significant. However, the mean rating of the positive mood group was near the scale's midpoint which according to Dixon and Bird (1981) is one of the less reliable points on a bi-polar scale. Based on those mixed findings, it must be considered that a successful induction may not have occurred.

Alternatively, if the mood induction was successful, the effect of mood on emotional manipulation may have been influenced by factors not considered in this study. Firstly, the focus of the mood may have influenced reported manipulative behaviours. The hypotheses around mood were based on a model that explains the mood congruent effect of mood through pro-social behaviour (Forgas, 2001). However, the Focus of Attention Model (Thompson, Cowan, & Rosenhan, 1980) proposes that the effect of mood on behaviour varies with mood focus in addition to mood valance. Specifically, that a negative mood that focussed on others resulted in higher helping than a self-focussed negative mood. Rosenhan, Salovey, and Hargis (1981) noted that a positive other-focussed mood reduced rather than increased helping. In the current study, it was proposed that a mood would prime mood congruent behaviour. However, if the focus of a mood is related to others, it appears a mood may prime mood incongruent behaviour. Future research could consider emphasising the focus of the mood on the self during the mood induction, and including a mood check.

Notably, when emotional manipulation at Time 2 was regressed onto emotional manipulation at Time 1, emotional intelligence, agreeableness and conscientiousness, the only consistent significant predictor was Time 1 emotional manipulation. In all cases, the relevant Time 1 emotional manipulation variable positively predicted its Time 2 counterpart. Effect sizes in all cases were large (Cohen, 1992). Time 1 variables explained a large amount of variance in Time 2 scores when included in the model (63%, 50.8%, 46.4%, and 65%) for emotional manipulation ability, emotional manipulation willingness, mood-worsening and inauthentic strategy use respectively. The additional variance explained by personality and mood was substantially smaller. This was somewhat larger for mood-worsening, with an extra 8.1% of variance explained.

Broadly, this indicates that people tend to perceive their ability and their willingness to emotionally manipulate, as well as their use of emotional manipulation strategies in a fairly consistent way, regardless of the personality or mood variables assessed in the current study. This seems particularly the case for willingness, where Time 1 willingness was the only significant predictor in that model, while agreeableness played a role in predicting both emotional manipulation ability and mood-worsening, and mood only significantly contributed to inauthenticity.

Limitations and Additional Considerations for Research

Surprisingly, there were no differences in gender on emotional manipulation. This is contrary to the findings of Hyde and Grieve (2016) who found that gender made significant contributions within each multivariate model. However, it has been suggested that gender differences may be dependent on the other constructs within the model. Grieve and Mahar (2010) and Grieve and Panebianco (2013) both included psychopathic traits when predicting emotional manipulation, and scores on

measures of psychopathic traits were shown to vary according to gender. The effect of gender differences in those traits could be the influential factor in gender differences within those models.

A consistent finding in the current study was that the Time 1 emotional manipulation variables consistently predicted the associated Time 2 variables. It was essential to include the Time 1 variables in order to control for the effect of individual differences in pre-existing manipulative tendencies, following the mood induction. This is an appropriate approach, given that the relationship between Time 1 emotional intelligence, agreeableness, conscientiousness and mood was anticipated to play an important role in predicting the outcome variables (e.g. Liang & Zeger, 1986). However, the contribution of Time 1 to the Time 2 models is somewhat overestimated, due to common method bias emanating from the measures themselves (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Nonetheless, the strength of the Beta weights in the models suggests that even if the variance is inflated, it is still likely that a true effect underpins the results. Using different techniques to assess emotional manipulation at Time 1 would help to minimise concerns around shared method variance.

Related to these assessment concerns, is that the current study assessed perceptions of emotional manipulation ability and strategies, rather than actual emotional ability and strategies. This is a limitation of the current study. Ideally, a behavioural measure of emotional manipulation would help to overcome this. However, behavioural responses would be difficult to operationalise, and would likely be open to critiques similar to those levelled at performance measures of emotional intelligence (Maul, 2012; Schlegel, 2016). Furthermore, it could be suggested that having participants rate their perceived pro-social capabilities could

make results unclear, due to the disparity between outcomes on trait measures of emotional intelligence and performance measure (Petrides & Furnham, 2001)

Participants in this study reported how frequently they engaged in emotional manipulation. While this approach is appropriate (Davis & Nichols, 2016), the accurate assessment of an individual's willingness to engage in those behaviours cannot be assured in the current study. As participation was anonymous, it can be reasonably assumed that socially desirable responding was not likely to systematically influence the data. However, as the willingness measure required participants to report how often they engaged in an emotionally manipulative behaviour (e.g. daily, weekly), this presumes that the individual is able to accurately recall how often they engage in these behaviours. It is also assumed that individuals have insight to know when their behaviours are emotionally manipulative.

The findings from the current study are not generalisable, as emotional manipulation was examined broadly. Previous research has investigated the mechanisms of emotional manipulation within specific contexts, such as in the workplace. The mechanisms of emotional manipulation may vary situationally, depending on how important the desired outcome is to that person. In a workplace setting for example, the motivation to manipulate others may be greater due to higher stakes situations.

Implications

The results of this study suggest that mood may be an influential factor in whether a person engages in emotional manipulation. Being the perceived target of emotional manipulation has been shown to have detrimental psychological effects (Hyde, Grieve, and Scott, 2016). Linton and Power (2013) revealed the wide prevalence of these behaviours in the workplace, which suggests that further

investigation in that context is important. As mood has been identified as a possible mechanism of emotional manipulation, specifically that a positive mood decreases manipulative tendencies, an intervention to assist the individuals who engage in those behaviours could be investigated. Previous research has studied the influence of personality traits, and although it is necessary to identify more stable and enduring mechanisms, the benefit of identifying more fluid predictors can be seen when considering interventions. People who manipulate others could learn to regulate their moods in order to benefit others.

Summary and Concluding Comments

This study examined the effect of emotional intelligence, personality, and mood on emotional manipulation, within an experimental paradigm for the first time. Although the findings indicate that the role of emotional intelligence may not as dominant in predicting emotional manipulation as previously suggested, the importance of the role of agreeableness has been highlighted. The predicted role of conscientiousness was not found in the current study, which could be due to a less dominant presence of pro-social facets.

The finding that a positive mood decreases the likelihood or reported inauthentic strategy has provided a basis for future studies to consider the influence of mood on maladaptive behaviours. However, this effect should be examined in specific contexts. Clearly, the results of this study, together with previous findings highlight the importance of continuing to investigate the use of manipulative behaviours. The current findings highlight that this behaviour can be influenced by situational factors, which suggests that it is not only individuals who have an overall tendency to behave in this way.

References

Ali, F., Amorim, I. S., & Chamorro-Premuzic, T. (2009). Empathy deficits and trait

emotional intelligence in psychopathy and Machiavellianism. *Personality and*

Individual Differences, *47*, 758-762. doi:10.1016/j.paid.2009.08.021

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of*

Mental Disorders. (5th ed.). Washington:APA

Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major

dimensions of personality. *Journal of Personality Assessment, 91*, 340-345.

doi: 10.1080/00223890902935878

Austin, E. J., Farrelly, D., Black, C., & Moore, H. (2007). Emotional intelligence,

Machiavellianism and emotional manipulation: Does EI have a dark side?

Personality and Individual Differences, 43, 179-189.

doi:10.1016/j.paid.2006.11.019

Austin, E. J., & O'Donnell, M. M. (2013). Development and preliminary validation

of a scale to assess managing the emotions of others. *Personality and*

Individual Differences, 55, 834-839. doi:10.1016/j.paid.2013.07.005

Austin, E. J., Saklofske, D. H., Smith, M., & Tohver, G. (2014). Associations of the

managing the emotions of others (MEOS) scale with personality, the Dark

Triad and trait EI. *Personality and Individual Differences, 65*, 8-13.

doi:10.1016/j.paid.2014.01.060

Baker, R. C., & Guttfreund, D. G. (1993). The effects of written autobiographical

recollection induction procedures on mood. *Journal of Clincial Psychology,*

49, 563-567. doi:10.1002/1097-4679(199307)49:4<563::AID-

JCLP2270490414>3.0.CO;2-W

Beedie, C., Terry, P., & Lane, A. (2005). Distinctions between emotion and mood. *Cognition & Emotion*, *19*, 847-878. doi: 10.1080/02699930541000057

Brackett, M. A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of Emotional Intelligence. *Personality and Social Psychology Bulletin, 29,* 1147-1158. doi: 10.1177/0146167203254596

Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass, 5,* 88-103. doi: 10.1111/j.1751-9004.2010.00334.x

Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personality and Social Psychology, 55*, 211-229. doi:10.1037/0033-2909.102.1.91

Christensen, L. B. (2004). *Experimental methodology.* Boston, MA: Allyn and Bacon.

Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism*: New York : Academic Press, 1970.

Cohen, J. (1992). A power primer. *Psychological bulletin*, *112*, 155. doi: 10.1037/0033-2909.112.1.155

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). Applied multiple regression/correlational analysis for the behavioural sciences. Taylor & Francis. Retrieved from http://ebookcentral.proquest.com.ezproxy.utas.edu.au/lib/utas/detail.action?docID=1222653

Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. *Psychological Review, 82,* 407-428. doi: 10.1037/0033-295X.82.6.407

Crawford, J. R., & Henry, J. D. (2004). The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 43*, 245-265. doi:10.1348/0144665031752934

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297-334. doi 10.1007/BF02310555

Dixon, J. S., & Bird, H. A. (1981). Reproducibility along a 10 cm vertical visual analogue scale. *Annals of the Rheumatic Diseases*, *40*, 87-89. doi: 10.1136/ard.40.1.87

Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The Mini-IPIP Scales: Tiny-yet-effective measures of the Big Five Factors of Personality. *Psychological Assessment, 18*, 192-203. doi:10.1037/1040-3590.18.2.192

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London: Sage.

Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology, 80*, 1011-1027. doi:10.1037//0022-3514.80.6.1011

Forgas, J. P. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological bulletin*, *117*, 39. doi: 10.1037/0033-2909.117.1.39

Forgas, J. P., Dunn, E., & Granland, S. (2008). Are you being served…? An unobtrusive experiment of affective influences on helping in a department

store. *European Journal of Social Psychology*, *38*, 333-342. doi: 10.1002/ejsp.455

Glass, G. V., Peckham, P. D., & Sanders, J. R. (1972). Consequences of failure to meet assumptions underlying the fixed effects analyses of variance and covariance. *Review of Educational Research, 42,* 237-288. doi: 10.3102/00346543042003237

Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate behavioral research*, *26*, 499-510. doi: 10.1207/s15327906mbr2603_7

Grieve, R. (2011). Mirror mirror: The role of self-monitoring and sincerity in emotional manipulation. *Personality and Individual Differences*, *51*, 981-985. doi: 10.1016/j.paid.2011.08.004

Grieve, R., & Mahar, D. (2010). The emotional manipulation-psychopathy nexus: Relationships with emotional intelligence, alexithymia and ethical position. *Personality and Individual Differences, 48*, 945-950. doi:10.1016/j.paid.2010.02.028

Grieve, R., & Padgett, C. R. (2016). The Effect of Mood on Emotional Self-Efficacy. Manuscript submitted for publication.

Grieve, R., & Panebianco, L. (2013). Assessing the role of aggression, empathy, and self-serving cognitive distortions in trait emotional manipulation. *Australian Journal of Psychology, 65*, 79-88. doi:10.1111/j.1742-9536.2012.00059.x

Hyde, J., & Grieve, R. (2014). Able and willing: Refining the measurement of emotional manipulation. *Personality and Individual Differences, 64*, 131-134. doi:10.1016/j.paid.2014.02.036

Hyde, J., Grieve, R., & Scott, J. (2016). Being a target of perceived emotional

manipulation: Relationships with mental health and well-being. *Manuscript*

submitted for publication

Izard, C. E. (2010). The many meanings/aspects of emotion: Definitions, functions,

activation, and regulation. *Emotion Review, 2*, 363-370.

doi:10.1177/1754073910374661

Jakobwitz, S., & Egan, V. (2006). The dark triad and normal personality traits.

Personality and Individual Differences, 40, 331-339.

doi:10.1016/j.paid.2005.07.006

Liang, K., & Zeger, S. L. (1986). Longitudinal data analysis using general linear

models. Biometrika, *73*, 13-22. doi: 10.1177/1754073916650493

Lee. K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO

personality inventory. *Multivariate Behavioural Research, 39,* 329-358. doi:

10.1207/s15327906mbr3902_8

MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the

mediation, confounding and suppression effect. *Prevention science*, *1*, 173-

181. doi 10.1023/A:1026595011371

Malouff, J. M., Schutte, N. S., & Thorsteinsson, E. B. (2014). Trait emotional

intelligence and romantic relationship satisfaction: A meta-analysis. *The*

American Journal of Family Therapy, *42*, 53-66. doi:

10.1080/01926187.2012.748549

Maul, A. (2012). The validity of the Mayer–Salovey–Caruso Emotional Intelligence

Test (MSCEIT) as a measure of emotional intelligence. *Emotion Review, 4*,

394-402. doi: 10.1177/1754073912445811.

Mayer, J. D., & Salovey, P. (1997). What is Emotional Intelligence? In D. Sluyter & P. Salovey (Eds.), Emotional development and Emotional Intelligence: Educational implications (pp.2-21). New York: Basic Books.

Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality and Individual Differences, 49*, 554-564. doi:10.1016/j.paid.2010.05.029

Neumann, C. S., & Hare, R. D. (2008). Psychopathic traits in a large community sample: Links to violence, alcohol use, and intelligence. *Journal of Consulting and Clinical Psychology, 76,* 893-899. doi: 10.1037/0022-006X.76.5.893

O'Connor, P. J., & Athota, V. S. (2013). The intervening role of Agreeableness in the relationship between Trait Emotional Intelligence and Machiavellianism: Reassessing the potential dark side of EI. *Personality and Individual Differences, 55*, 750-754. doi:10.1016/j.paid.2013.06.006

Orne, M. T. (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American psychologist, 17*, 776. doi: 10.1037/h0043424

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of research in personality, 36*, 556-563. doi:10.1016/S0092-6566(02)00505-6

Pearson, E. S., & Hartley, H. O. (1954). *Biometrika tables for statisticians, Volume 1.* New York: Cambridge University Press.

Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences, 29*, 313-320.

Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European journal of personality, 15*, 425-448. doi:10.1002/per.416

Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M., Furnham. A., & Pérez-González, J. (2016). Developments in trait emotional intelligence research. *Emotion Review, 8*, 335-341. doi: 10.1177/1754073916650493

Petrides, K. V., Pérez-González, J. C., & Furnham, A. (2007). On the criterion and incremental validity of trait emotional intelligence. *Cognition and Emotion, 21*, 26-55. doi: 10.1080/02699930601038912

Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology, 98*, 273-289. doi:10.1348/000712606X120618

Rosenhan, D. L., Salovey, P., & Hargis, K. (1981). The joys of helping: Focus of attention mediates the impact of positive affect on altruism. *Journal of Personality and Social Psychology, 40*, 899-905. doi:10.1037//0022-3514.40.5.899

Saklofske, D. H., Austin, E. J., & Minski, P. S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences, 34*, 707-721. doi: 10.1016/S0191-8869(02)00056-9

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality, 9*, 185-211. doi:10.2190/DUGG-P24E-52WK-6CDG

Scherer, K. R. (2005). What are emotions? and how can they be measured? *Social Science Information, 44*, 695-729. doi:10.1177/0539018405058216

Schlegel, K. (2016). Comment: Looking beyond the ability EI model facilitates the development of new performance-based tests. *Emotion Review, 8*, 302-303. doi: 10.1177/1754073916650501.

Schutte, N. S., & Loi, N. M. (2014). Connections between emotional intelligence and workplace flourishing. *Personality and Individual Differences, 66,* 134-139. doi: 10.1016/j.paid.2014.03.031

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*, 167-177. doi:10.1016/s0191-8869(98)00001-4

Smith, L., Heaven, P. C., & Ciarrochi, J. (2008). Trait emotional intelligence, conflict communication patterns, and relationship satisfaction. *Personality and Individual Differences, 44*, 1314-1325. doi:10.1016/j.paid.2007.11.024

Stern, R. A., & Bachman, D. L. (1991). Depressive symptoms following stroke. *Am J Psychiatry, 148*, 351-6. doi: 10.1176/ajp.148.3.351

Tabachnick, B.G., & Fidell, L.S. (2012). *Using multivariate statistics (6th ed.).* Needham Heights, MA: Allyn & Bacon.

Thompson, W. C., Cowan, C. L., & Rosenhan, D. L. (1980). Focus of attention mediates the impact of negative affect on altruism. *Journal of Personality and Social Psychology, 38*, 291-300. doi:10.1037/0022-3514.38.2.291

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology, 54*, 1063-1070. doi: 10.1037/0022-3514.54.6.1063

Appendix A1

Online Participant Demographic Questionnaire

* 2. What is your age?

[▲▼]

* 3. Is English your first language?

○ Yes

○ No

* 4. What is your gender?

○ Male

○ Female

○ Other

* 5. What is your ethnicity?

○ Aboriginal

○ White/Caucasian

○ Black/African descent

○ Asian

○ Pacific Islander

○ Hispanic

○ Other (please specify)

[   ]

* 6. What is the highest level of education that you have completed?

○ High school/college

○ TAFE certificate/diploma

○ Bachelor's degree

○ Master's degree

○ Doctoral degree

* 7. Are you religious?

○ No

○ Yes (please specify your religion)

Appendix A2

The Emotional Intelligence Self-Report Scale (Schutte et al. 1998)

"Please indicate the extent to which you agree with the following statements:"

Responses are made according to a 5-point scale, where 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral (neither agree nor disagree)*, 4 = *agree*, and 5 = *strongly agree*.

1. I know when to speak about my personal problems to others

2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them

3. I expect that I will do well on most things I try

4. Other people find it easy to confide in me

5. I find it hard to understand the non-verbal messages of other people *

6. Some of the major events of my life have led me to re-evaluate what is important and not important

7. When my mood changes, I see new possibilities

8. Emotions are one of the things that make my life worth living

9. I am aware of my emotions as I experience them

10. I expect good things to happen

11. I like to share my emotions with others

12. When I experience a positive emotion, I know how to make it last

13. I arrange events others enjoy

14. I seek out activities that make me happy

15. I am aware of the non-verbal messages I send to others

16. I present myself in a way that makes a good impression on others

17. When I am in a positive mood, solving problems is easy for me

18. By looking at their facial expressions, I recognize the emotions people are experiencing

19. I know why my emotions change

20. When I am in a positive mood, I am able to come up with new idea

21. I have control over my emotions

22. I easily recognize my emotions as I experience them

23. I motivate myself by imagining a good outcome to tasks I take on

24. I compliment others when they have done something well

25. I am aware of the non-verbal messages other people send

26. When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself

27. When I feel a change in emotions, I tend to come up with new ideas

28. When I am faced with a challenge, I give up because I believe I will fail *

29. I know what other people are feeling just by looking at them

30. I help other people feel better when they are down

31. I use good moods to help myself keep trying in the face of obstacles

32. I can tell how people are feeling by listening to the tone of their voice

33. It is difficult for me to understand why people feel the way they do *

*Items marked with * are reversed scored*

The final score is obtained by summing responses to all items.

Appendix A3

The HEXACO-60 (Ashton & Lee, 2009); Agreeableness subscale

"Please indicate how much you agree with the following statements"

Responses are made on a scale from 1 to 5, where 1 = *strongly disagree*, and 5 = *strongly agree.*

1. I rarely hold a grudge, even against people who have badly wronged me.

2. People sometimes tell me that I am too critical of others. *

3. People sometimes tell me that I'm too stubborn. *

4. People think of me as someone who has a quick temper. *

5. My attitude toward people who have treated me badly is "forgive and forget."

6. I tend to be lenient in judging other people.

7. I am usually quite flexible in my opinions when people disagree with me.

8. Most people tend to get angry more quickly than I do.

9. Even when people make a lot of mistakes, I rarely say anything negative.

10. When people tell me that I'm wrong, my first reaction is to argue with them.*

*Items marked with * are reversed scored*

The final score is obtained by summing responses to all items.

Appendix A4

The HEXACO-60 (Ashton & Lee, 2009); Conscientiousness subscale

"Please indicate how much you agree with the following statements"

Responses are made on a scale from 1 to 5, where 1 = *strongly disagree*, and 5 = *strongly agree.*

1. I plan ahead and organise things, to avoid scrambling at the last minute.

2. I often push myself very hard when trying to achieve a goal.

3. When working on something, I don't pay much attention to small details. *

4. I make decisions based on the feeling of the moment rather than on careful thought. *

5. When working, I sometimes have difficulties due to being disorganised. *

6. I do only the minimum amount of work needed to get by. *

7. I always try to be accurate in my work, even at the expense of time.

8. I make a lot of mistakes because I don't think before I act. *

9. People often call me a perfectionist.

10. I prefer to do whatever comes to mind, rather than stick to a plan. *

*Items marked with * are reversed scored*

The final score is obtained by summing responses to all items.

Appendix A5

Emotional Manipulation Ability (Hyde & Grieve, 2014)

"Please indicate the extent to which you agree with the following statements"

Responses to statements are made according to a 5-point scale ranging from 1 = *strongly disagree*, and 5 = *strongly agree*.

1. I know how to embarrass someone to stop them behaving in a particular way.

2. I know how to make another person feel uneasy

3. I know how to play two people off against each other

4. I know how to make someone feel ashamed about something that they have done in order to stop them from doing it again

5. I know how to 'wind up' my close family and friends

6. I can use my emotional skills to make others feel guilty

7. I can make someone feel anxious so that they will act in a particular way.

8. I can pay someone compliments to get in their 'good books.'

9. I am good at reassuring people so that they're more likely to go along with what I say.

10. I sometimes pretend to be angrier than I really am about someone's behaviour in order to induce them to behave differently in future.

The final score is obtained by summing responses to all items.

Appendix A6

Emotional Manipulation Willingness (Hyde & Grieve, 2014)

Participants rate the frequency according to a 5-point scale, where 1 = *Never*, 2= *Now and then*, 3 = *Monthly*, 4= *Weekly*, and 5 = *Daily*.

1. How often do you embarrass someone to stop them behaving in a particular way.

2. How often do you use your emotional abilities to make another person feel uneasy?

3. How often do you play two people off against each other?

4. How often do you make someone feel ashamed about something that they have done in order to stop them from doing it again?

5. How often do you 'Wind up' your close family and friends?

6. How often do you use emotional skills to make others feel guilty

7. How often do you make someone feel anxious so they would behave in a particular way?

8. How often do you pay someone compliments to get in their 'good books'?

9. How often do reassure people so that they're more likely to go along with what I say?

10. How often do you pretend to be angrier than you really were about someone's behaviour in order to induce them to behave differently in future?

The final score is obtained by summing responses to all items.

Appendix A7

The Managing the Emotions of Others Scale (MEOS; Austin & O'Donnell, 2013):

Mood-Worsening subscale.

"Please indicate the extent to which you agree with the following statements:"

Responses are made according to a 5-point Likert-type scale, where 1 = *strongly*

disagree, 2 = *disagree*, 3 = *neutral (neither agree nor disagree)*, 4 = *agree*, 5 =

strongly agree.

1. I sometimes put someone down in public to make them feel bad.

2. I use criticism to make others feel that they should work harder.

3. I can make someone feel anxious so that they will act in a particular way.

4. I sometimes try to undermine another person's confidence.

5. If I don't like someone's behaviour I make negative comments in order to make them feel bad.

6. I sometimes use my knowledge of another person's emotional triggers to make them angry.

7. I use anger to get others to do things that I want them to do.

8. I know how to make someone feel ashamed about something that they have done in order to stop them from doing it again.

9. I know how to embarrass someone to stop them from behaving in a particular way.

10. I use displays of anger to motivate others.

11. I sometimes try to make someone feel bad by blaming them for something which I know isn't their fault.

12. If someone is annoying me, I sometimes retaliate by saying something unkind that will make them feel bad.

13. I can use my emotional skills to make others feel guilty.

The final score is obtained by summing responses to all items.

Appendix A8

The Managing the Emotions of Others Scale (MEOS; Austin & O'Donnell, 2013):

Inauthenticity subscale.

"Please indicate the extent to which you agree with the following statements:"

Responses are made according to a 5-point Likert-type scale, where 1 = *strongly*

disagree, 2 = *disagree*, 3 = *neutral (neither agree nor disagree),* 4 = *agree*, 5 =

strongly agree.

1. I sometimes sulk to make someone feel guilty.

2. I sometimes use flattery to gain or keep someone's good opinion.

3. If someone says or does something I don't like, I sometimes sulk.

4. I sometimes sulk to get someone to change their behavior.

5. If I want someone to do something for me, I am especially nice to them before asking.

6. If someone's behaviour has caused me distress, I try to make them feel guilty about it.

7. I can pay someone compliments to get in their 'good books'.

8. If I want someone to do something for me, I try to elicit sympathy from them.

9. I sometimes exaggerate a personal or health problem in order to gain sympathy and avoid doing a task.

10. I sometimes deliberately try to make another person feel jealous.

11. I am especially nice to people whose friendship is advantageous to me.

The final score is obtained by summing responses to all items.

Appendix A9

The Autobiographical Mood Induction Procedure (Baker & Guttfreund, 1993)

Instructions

We would now like to ask you to take a few minutes to look into your past and think about what have been two sad events that you have experienced in your life. When you finish reading these instructions, take 2 minutes to sit quietly, thinking of these events. Your tutor will tell you when the time is over. We would like you to try and think of all the details of what you experienced at the time, to the point that you could imagine this happening to you right now. Think about how old you were, who were the people or events involved, and what your feelings were.

When the 2 minutes is up, we would like you describe (writing on this sheet of paper), the two events that you have remembered. You will have five minutes to write your description. No one else will read what you have written, and you can take this piece of paper with you at the end of the class. Your tutor will let you know when the 5 minutes is up.

Appendix A10

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988).

"Indicate to what extent you feel this way right now, that is, at the present moment"

Responses are made according to a five point Likert-type scale, where 1 = very slightly or not at all, 2 = a little, 3 = moderately, 4= quite a bit, and 5 = extremely.

1. Interested *

2. Irritable

3. Distressed

4. Alert *

5. Excited *

6. Ashamed

7. Upset

8. Inspired *

9. Strong *

10. Nervous

11. Guilty

12. Determined *

13. Scared

14. Attentive *

15. Hostile

16. Jittery

17. Enthusiastic *

18. Active *

19. Proud *

20. Afraid

*Items marked with * form the positive affect subscale*

*Items not marked with * form the negative affect subscale*

The final score for each subscale is obtained by summing the items relevant to that subscale.

Appendix A11

Visual Analogue Scales

 "How would you rate your mood at the current time?"

Participants rate their current mood by marking on the line which represents their current mood by making marks on the horizontal lines

☺---☹

Sad---Happy

The score on the word scale is reversed by subtracting it from the line length so that on both scales, scores at the lower end of the line indicate a happy mood, scores toward the middle point indicate a neutral mood, and high scores suggest a sad mood.

Appendix B

Ethical Approval Letter

Social Science Ethics Officer
Private Bag 01 Hobart
Tasmania 7001 Australia
Tel: (03) 6226 2763
Fax: (03) 6226 7148
Katherine.Shaw@utas.edu.au

HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

3 May 2016

Dr Rachel Grieve
Division of Psychology
University of Tasmania

Student Researcher: Catharine Allen

Sent via email

Dear Dr Grieve

Re: MINIMAL RISK ETHICS APPLICATION APPROVAL
Ethics Ref: **H0015713 - Cognitive factors associated with emotion**

We are pleased to advise that acting on a mandate from the Tasmania Social Sciences HREC, the Chair of the committee considered and approved the above project on 2 May 2016.

This approval constitutes ethical clearance by the Tasmania Social Sciences Human Research Ethics Committee. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approval of other bodies or authorities is required. It is recommended that the proposed research should not commence until you have satisfied these requirements.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.

2. <u>Complaints</u>: If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7479 or human.ethics@utas.edu.au.

3. <u>Incidents or adverse effects</u>: Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. <u>Amendments to Project</u>: Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.

5. <u>Annual Report</u>: Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. **Failure to submit a Progress Report will mean that ethics approval for this project will lapse.**

6. <u>Final Report</u>: A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely

Katherine Shaw
Executive Officer
Tasmania Social Sciences HREC

Appendix C

Online Participant Information Sheet

Dear KHA106 students,

As part of the 'Cognition' and 'Motivation & Emotion' practical activities that are part of this unit, we will be looking at the relationship between memory and emotion (see pages 71-72 and 83 of the *KHA106 Practical Activity Workbook*). We would like to invite you to consent to contribute your data for research purposes.

None of the information that you provide in this activity will require you to provide any identifying information. As such, **your data will be completely anonymous**. There is no penalty in any form if you choose not to contribute your data. If you agree to release your data, please indicate this at the bottom of this page

If you have any questions, please free to email either of the researchers (rachel.grieve@utas.edu.au or christine.padgett@utas.edu.au).

Thank you,

Rachel and Christine

Unit Coordinators KHA106

[This study has been approved by the Tasmanian Social Sciences Human Research Ethics Committee (H15713 and H15690). If you have concerns or complaints about the conduct of this study, please contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants]

* **1. Do you consent for your data to be used for research purposes?**

◯ Yes

◯ No