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Motivated Prediction of Future Feelings:

The Effects of Mood and Mood Focus on Affective Forecasts

By

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Abstract

People often predict they will experience more positive or more negative emotional reactions to upcoming pleasant and unpleasant events respectively, than they actually do. Although researchers have identified several cognitive processes underlying this bias in affective forecasting, the present research examined the role of motivational factors. We proposed that people sometimes generate relatively positive affective forecasts to future positive events (or less negative affective forecasts to future negative events) as a mood regulation strategy. That is, they may attempt to cope with threatening negative feelings by anticipating pleasant emotions in the future. More specific hypotheses were derived from recent research examining the impact of negative mood and mood focus on various self-enhancing cognitions. We hypothesised that people would predict more positive feelings to upcoming positive events and less negative feelings when predicting for upcoming negative events when they adopt a reflective focus on their current negative moods (wherein they acknowledge their negative feelings and interpret them as a signal for mood-regulation efforts) rather than a ruminative focus (wherein they dwell passively on their feelings). Results from two studies were generally consistent with this hypothesis. Participants who focussed on their current feelings in a reflective manner predicted more positive future feelings (across predictions for both positive and negative future events) in the negative mood condition than in the neutral mood condition. Those who ruminated on their current feelings showed the opposite pattern.

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People often make decisions (e.g., to take a vacation, purchase a new automobile, to enter law school, undergo cosmetic surgery) based upon their predictions of how the experience of these events will make them feel. The quality of their decisions depends upon the accuracy of their predictions (Loewenstein & Schkade, 1999). People are generally quite accurate in predicting that intuitively positive events (e.g., a lottery win, eating a nice meal, a tropical vacation) will result in an overall pleasurable experience, and likewise, that intuitively negative events (e.g., a relationship breakup, suffering from the flu virus, watching one's favourite sports team lose) will be a negative experience. However, people's affective forecasts (or predictions of future feelings) have consistently shown inaccuracies in other, perhaps less obvious, but important ways. Research has repeatedly demonstrated that people tend to overestimate just how happy or sad they will feel in response to positive and negative events respectively, both in terms of how long the emotional experience will last (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998) as well as how intense the initial experience will be (Buehler & McFarland, 2001). Thus far, several important cognitive processes have been implicated as possible explanations for the biases evident in people's affective forecasts. The current study explored the possibility that in addition to these previously described cognitive explanations, motivational concerns may also play a role in people's tendency to mispredict the magnitude of their emotional experience to various future events.

Biases in Affective Forecasting

Research on affective forecasts demonstrates a "durability bias", in that people tend to make inaccurate predictions concerning how long they expect their emotional reactions to various events to last (Gilbert et al., 1998; Wilson, Wheatley, Meyers,

Gilbert, & Axsom, 2000). Wilson, Meyers, and Gilbert (2001) describe this bias as "the tendency to overestimate the duration of one's emotional reactions to future events". For example, college football fans were asked to make predictions concerning how they would feel in the days following an anticipated match in which their favourite team had either won or lost (Wilson et al., 2000). Although the participants predicted that the particular outcome would influence their level of happiness for several days that followed, assessments of the fans' level of happiness 1 to 3 days after either a win or loss did not match their initial predictions. The participants' level of happiness was not as dramatically altered by either the desired victory nor the dreaded loss in the days following the match, as they had originally predicted it would be.

Interestingly, a similar bias can occur in retrospect as well. Mitchell, Thompson, Peterson, and Cronk (1997) asked participants to predict how enjoyable an upcoming bicycle trip would be. Participants not only predicted that the trip would be more enjoyable than it actually was rated at the time it occurred ("prospective bias"), but when later asked to recall how enjoyable the experience had been, participants remembered the trip to have been more enjoyable than they had in fact reported ("retrospective bias"). Therefore, this retrospective bias can influence how people predict their future feelings about a particular event if they were to consult their memories of emotional reactions to similar past events.

Another related bias in affective predictions has been termed the "intensity bias" (Buehler & McFarland, 2001). The intensity bias may be understood as people's tendency to overestimate the initial intensity of their future feelings to both positive and negative events. In several related studies, participants' predicted feelings were compared to their actual affective reactions to a number of events. For example, in one study participants were asked, several weeks in advance, to generate predictions concerning

how they would feel on Christmas day (which participants generally construed as a positive event). Participants were then asked to reply to a questionnaire measuring their actual feelings on Christmas day. Participants' predicted feelings were more intense than were the feelings that they actually experienced. The intensity bias has been demonstrated for negative events as well. For example, in another study by these authors, participants overestimated their emotional reactions to discovering that they received a lower grade than they had anticipated.

Interestingly, Wilson et al. (2001) note that these two common biases in affective forecasting occur independently of the degree of novelty regarding the event being predicted for, as surely sports fans have seen their favourite team win and lose many times over the years, and students have often received course grades. In addition, these authors have recently suggested combining the durability and intensity biases into a single term, called the "impact bias". They suggest that whenever people attempt to generate predictions concerning their future feelings, they are likely to overestimate "the enduring impact that future events will have on their emotional lives". These authors point to the fact that this overestimation has been evidenced by many different populations as well as by many different researchers (Buehler & McFarland, 2001; Gilbert et al., 1998; Loewenstein & Schkade, 1998; Mitchell et al., 1996; Wilson et al., 2001; etc.).

Sources of Bias

Thus far, the literature on affective forecasting has proposed several cognitive processes that may help us understand why people typically overestimate the emotional impact that various future events will have in their lives (for reviews see Loewenstein & Schkade, 1999 and Gilbert, Driver-Linn, & Wilson, 2000a). The present research examined motivational factors that could also contribute to people's tendency to predict

strong emotional reactions, and our hypotheses were not derived from the existing cognitive explanations. Nevertheless, to provide a relevant context, the major cognitive explanations are discussed briefly below, organised into four main categories.

Inaccurate Intuitive Theories. The first category suggested by Loewenstein and Schkade (1999) includes the notion that people often hold several incorrect intuitive theories about what will bring them happiness. Although research in affective forecasting has not examined this possibility thoroughly, it seems likely that using one of these incorrect intuitive theories of happiness as the basis for predicting future feelings could result in error. Ross (1989) demonstrated that people often refer to such theories while attempting to reconstruct their past emotional experiences. It is certainly plausible that people could use their general beliefs about how people react to events as the basis for their predictions regarding how they may be affected by a similar future event. However, in order for this prediction strategy to be effective, the recall of our past emotional reactions must be accurate. McFarland, Ross and DeCourville (1989) provide evidence that people's ability to recall past affective reactions may not be as accurate as they might suspect. Female participants' recollections of their past menstrual periods (concerning the time course and pain intensity) had a higher correspondence with their personal theories about the effects of menstruation than with their actual experience, as indicated by on-line journal ratings. Therefore, if people consult their memories of a particular event for purposes of predicting future affective reactions, and that recall more closely resembles an incorrect intuitive theory than actual past experience, the accuracy of the affective predictions is likely to be compromised.

A literature review concerning emotional memory conducted by Christianson and Safer (1996, p. 235; cited in Gilbert et al., 2000a) concluded that "there are apparently no published studies in which a group of subjects has accurately recalled the intensity and/or

frequency of their previously recorded emotions". This conclusion casts serious doubt on the possibility that people could use their emotional memories of past experiences as the basis for generating accurate predictions for similar future events. There is some evidence that asking people to consider their relevant previous experiences may in fact, serve as a corrective force. For example, participants in the previously discussed Buehler and McFarland (2001) study, who were asked to consider relevant previous experiences, reported less extreme affective predictions for an upcoming event than participants who adopted only a narrow, future focus to the predicted event.

Focalism. A second major source of error, termed "focalism" by Wilson et al. (2000), arises when people focus too exclusively on the predicted event without considering other events (even those that may appear mundane and non-influential in nature) that may also regulate how they will eventually feel during, or immediately following the event in question. Recall the Wilson et al. (2000) study in which college students overestimated how a particular event (e.g., a loss by their favourite football team) would affect their emotional state. These researchers demonstrated that this finding was due, at least in part, to the fact that participants were too focussed on the emotional consequences of the loss (e.g., I will feel sad), and failed to consider how other events occurring at about the same time (e.g., going out on a date, or receiving a phone call from an old friend) would also influence their overall level of happiness. When researchers induced the students to focus less on the particular event, by asking them to consider a wider range of events that would be taking place, affective forecasts became less extreme. This idea of focalism is similar to the "focussing illusion" observed by Schkade and Kahneman (1998) whereby participants seemed to exaggerate the effect of climate on their overall subjective well-being. This led participants to believe that they would be more happy living in California than in the Midwest, despite the fact that there were no

significant differences in the actual reports of subjective well-being between participants from the two regions.

   Misconstrual. Another process contaminating the accuracy of people's affective predictions involves the problem of "construal", or "misconstrual" (Gilbert, Pinel, Wilson, Blumberg, &Wheatley,1998; Loewenstein & Schkade,1999). Despite the fact that any event may have numerous possible ways of unfolding, evidence suggests that people have a tendency to imagine events unfolding in a single, specific manner (Griffin, Dunning, & Ross, 1990; Griffin & Ross, 1991). In addition, Liberman and Trope (1998) have demonstrated that when imagining a distant future event, people have a tendency to focus on the more "central" qualities of that event (e.g., the event's perceived desirability) and not as much on the more "peripheral" concerns (e.g., the event's perceived feasibility). Buehler and McFarland (2001) suggest that these cognitive processes may often lead people to make predictions by imagining the best-case scenario for positive events and anticipating the worst-case scenario when generating predictions for negative events. It is conceivable that the accuracy of people's affective forecasts would be compromised if they tended to imagine a particular positive event unfolding in a specific, highly desirable manner. When this positive event is finally experienced, and it unfolds in a way that does not match the person's original construal, the person is likely to be less satisfied than they imagined at the time of prediction. A similar result can be expected for people's predictions of negative events. If people have a tendency to anticipate that a negative event will unfold in the worst way imaginable, then people's affective forecasts will not match their actual affective experience once the negative event has been played out, because their actual experience is likely to be less horrific than the worst case scenario they imagined at the time of prediction.

Closely related to the problem of construal, Gilbert, Gill, and Wilson (2000b) have suggested another possible explanation for the errors that typically occur when people attempt to predict their reactions to future events. They use the term "forecasting by proxy" which suggests that people create a mental image of a particular future event and then use this mental image as the basis for their predictions regarding how they would actually be affected by this event in the future. However, this hypothesised process is thought to compromise the accuracy of people's predictions for a few different reasons. One problem is that these mental images do not give sufficient consideration to the temporal location of the events being considered (Friedman, 1993). An event's temporal location refers to potentially important information regarding when the event is taking place such as the time of day (e.g., morning, evening) or season of the year (e.g., winter, summer). The temporal location of an event can have a great impact on the feelings it evokes. For example, even pasta lovers are unlikely to enjoy a plate of spaghetti at breakfast time. However, Gilbert et al. (2000b) suggest that it is usually the case, that "the temporal location of an event does not influence its representation in any imaginable way". Therefore, the accuracy of predicted feelings to future events may be compromised because people rely on mental representations of events, which lack information regarding the event's temporal context.

This account, however, does not suggest that people disregard the temporal information surrounding the predicted event completely. Rather, these authors suggest that temporal considerations occur only after the initial mental image has been created, as a correction process. Gilbert et al. (2000b) suggest that our tendency to give consideration to the temporal location of a particular event, only after one has generated the original mental representation, has implications for the accuracy of predicted feelings. People's final estimates, despite being subjected to some kind of correction procedure

(i.e., temporal correction), remain closer to their initial values than is warranted (Gilbert, 1991). In other words, people may insufficiently adjust their initial affective forecasts even after engaging in a temporal correction process.

Immune Neglect. Finally, a fourth explanation for why people may mispredict their emotional reactions to future negative events involves what Gilbert et al. (1998) call "immune neglect". These authors suggest that people have a "psychological immune system" that acts to dampen the impact that negative events have on their lives. This emotional dampening is thought to occur by several means (e.g., discounting, rearranging, suppressing, denial). Curiously, however, people are seemingly unaware of the effectiveness of such a self-protecting system. People may often predict that a particular negative event would have a more significant unpleasant impact on their emotional lives than it does because they are insufficiently aware of the power of their psychological immune system. It is interesting to note that unlike the other possible sources of error, which suggest that any discrepancies between people's affective predictions and their actual emotional reactions are due to processes occurring prior to the event's occurrence, this explanation implies that inaccuracies result because of what occurs both during and following the event.

Although each of the cognitive processes discussed above may contribute to biases in affective forecasts, there are likely to be other factors, beyond purely cognitive processes, that have important effects on people's predictions of their future feelings. In the present research, we explore the operation of motivational forces. Specifically, we propose that people's affective forecasts sometimes reflect desires to maintain positive affect at the time of prediction. In other words, people envision future happiness because it makes them feel good.

People's Pursuit of Happiness

As Gilbert et al. (2000a) note in their discussion of the impact bias in affective

forecasting, "of all the claims that psychologists have made about human universals, one

actually stands a chance of being true: People want happiness". An examination of how

people ultimately make their decisions can shed light on the extent to which they value

their happiness. For example, in a typical day people are faced with the task of making

several decisions. Some of these decisions may be viewed as relatively minor in

importance (e.g., what to eat for lunch, or what to watch on television), while others are

more consequential (e.g., which automobile to purchase, or which career to choose). In

each case, however, people can usually select from several viable options. For example,

consider the fact that any functional car could take people from their homes to their work,

yet people seem to prefer one model over the others. Having a preference for one option

over another, implies a belief that the preferred option may offer a greater amount of

satisfaction or enjoyment. This anticipation of an overall greater amount of satisfaction

may in effect, lead them to purchase a particular car that may cost significantly more than

others (e.g., choosing a Porsche over a Hyundai). If people's pursuit of happiness is of

such grand importance, then what can be expected if their desire for happiness is impeded

(e.g., by the experience of a negative event)?

A motivational account would suggest that people who experience negative

events should exert considerable effort to quickly regain their desired emotional state.

One of the more obvious ways that people may try to alleviate their current distress is by

altering their subsequent behaviour. For example, the experience of a negative mood may

make people more likely to act on their urges to perform behaviours that they believe

may help themselves to feel better (e.g., to go shopping for new clothes, to attempt to

resolve a dispute with an angry neighbour). People might also attempt to make

themselves feel better by engaging in various cognitive strategies (positive illusions, favourable social comparisons, temporal comparison, rationalisation, contrast effects, recall of positive memories, etc.). Research has demonstrated that people may attempt to engage in these various strategies when they are experiencing distress (McFarland & Buehler, 1997; Taylor & Brown, 1988; Wilson et al., 2001; Wilson & Ross, 2001; Wood, 1989). Apparently, people utilise a wide range of cognitive strategies in order to improve their affective state. Generating positive predictions concerning their futures might also serve this purpose.

The Effects of Current Mood on People's Affective Forecasts

There have been very few studies examining relations between people's current mood and their affective forecasts, but several theorists have discussed this issue. Gilbert et al. (2000a) discuss the possibility that people's predictions of the hedonic qualities of future events can be coloured by their current moods. They suggest that at the moment of prediction, a person's anticipated reaction to a future event may be a reflection of not only their mental images of the future event (forecasting by proxy), but also their current mood. Loewenstein, O'Donoghue, and Rabin (2000) suggest that someone in a negative mood may find it rather difficult to imagine how some positive future event would feel because they are unhappy in the present. Similarly, Loewenstein and Schkade (1999) suggested that people may generate inaccurate affective forecasts because they usually generate their predictions from a "cold" state (e.g., unaroused, satiated) and therefore, may have difficulty predicting how they would feel if they were immersed in a "hot" state (e.g., aroused, hungry). These examples imply that people's current moods may influence the way in which they forecast their future affective states. Specifically, people may be likely to predict their future feelings in a manner congruent with their current moods. For example, people experiencing a negative mood may generate affective

predictions to a future positive event that would be less positive than people experiencing either a neutral or positive mood.

We agree that people's current emotional state can have a significant impact on the way in which people predict their future feelings, but we propose that a very different type of effect sometimes occurs. Specifically, we suspect that people experiencing distress may sometimes generate more positive affective forecasts than people in either a neutral or positive mood. This pattern of mood incongruent prediction would be expected if people make use of positive affective forecasts to help improve their current moods. The opportunity to imagine how one will feel in response to a positive future event would be especially welcome to people in emotional distress, and thus, their affective forecasts may be especially positive.

One recent study on affective forecasts is highly pertinent, because it yielded a pattern of effects that seems consistent with the proposed mood incongruency effect (Wilson et al., 2001). The main purpose of the study was to examine whether people learn from their past emotional experiences that their reactions to various events were often shorter-lived and less intense than they might have originally anticipated. Participants were assigned to receive either positive (i.e., received an "A"), negative (i.e., received a "D") or no performance feedback immediately following the completion of a test that ostensibly measured social aptitude. Participants in the no feedback condition were advised that they would receive their test score at the completion of the study. Participants then rated their actual feelings (i.e., their post-test experience reports) five minutes after test completion.

All participants were then asked to make predictions concerning how they would feel about receiving either an "A" or a "D" on a variety of both similar and dissimilar tests to examine whether participants in the positive or negative feedback conditions

would learn from their previous experiences. The researchers then compared the

predictions of participants in the no feedback condition (forecasters) to the post-test

experience reports of participants in the positive or negative feedback conditions

(experiencers). Consistent with previous research in affective forecasting, results once

again demonstrated the durability bias. Specifically, participants receiving positive

feedback were not as happy as forecasters expected to be, while those receiving negative

feedback were not as unhappy as forecasters had predicted they would be.

Results also indicated that participants who had experienced positive feedback did

not appear to learn from their past experience as they predicted that a future success

would cause them to feel more happy than they actually felt after their previous success.

Interestingly, however, participants who originally received negative feedback did appear

to moderate their predictions in a manner that seemed consistent with the notion that one

could learn from their past emotional experiences. They predicted that receiving negative

feedback on an upcoming test would be less devastating than forecasters who had not

received performance feedback.

The researchers also assessed how much participants rationalised about their past

performance. Analysis revealed that participants in the negative feedback condition

engaged in significantly more rationalisation than participants in either of the other two

feedback groups. Specifically, the negative experiencers showed a broad range of self-

serving rationalisations in response to their failure (e.g., derogating the specific test that

was used, minimising the importance of the trait in general, as well as remarking on their

less than optimal physical and psychological states during the testing event). This

difference between the various feedback groups suggests that negative experiencers

rationalised in various self-serving ways. Therefore, Wilson et al. (2001) suggested that

when participants were later asked to generate their predictions, they simply remembered

their new reconstrual of the test as being inconsequential, and therefore predicted that a

future failure would not make them feel so bad. According to this account, participants

did not truly learn from their past experiences. Instead, their relatively moderate post-

feedback predictions reflected the cognitive processes of rationalisation and construal that

occurred when they received negative feedback.

However, this reconstrual explanation does not explain the additional finding that

negative experiencers also modified their affective forecasts for future dissimilar negative

events. For example, negative experiencers also predicted that they would be less affected

by a failure on future dissimilar tests than participants in the other feedback conditions.

Even if the negative experiencers had reconstrued the original test to have been invalid

and thus modified their predictions for future similar tests, it should not have necessarily

affected their affective predictions to doing poorly on an upcoming dissimilar test as well.

It can be argued, however, that these negative experiencers were simply acting in a

generally defensive manner by claiming that they would be relatively unaffected by

receiving any kind of negative feedback.

Interestingly, negative experiencers also predicted that they would feel better

during a future success than participants in the no feedback condition. This additional

finding seems inconsistent with the Wilson et al. (2001) suggestion that participants

changed their original construal of the specific test as well as the importance of the trait it

purportedly measured. Why would these negative experiencers predict that doing well on

a test that apparently had become both invalid and relatively unimportant make them

happy? We suggest that the pattern of findings is consistent with a motivational

interpretation. Participants who received negative feedback may have predicted more

positive future reactions in order to make themselves feel better.

It is also noteworthy to mention that participants in the Wilson et al. (2001) study were assigned to receive the rationalisation questionnaire immediately following their exposure to one of three kinds of feedback conditions. The arrival of the rationalisation questionnaire at this time may have been especially welcome by those participants who had just received negative performance feedback because it could likely have provided them with the opportunity to feel better about themselves. In this particular situation, the chance to rationalise about various aspects of the test, and the testing situation, may have been sufficient to reduce the threat associated with a poor performance. It is important to note that these negative experiencers did not just naturally begin to engage in the act of rationalisation on their own. It is possible that these participants may have just had a general motivation to alleviate their current distress and perhaps may have been able to accomplish this goal by using some other mood-repairing strategy (e.g., another cognitive strategy, behavioural expressions) had the opportunity been made available to them. This view is consistent with Steele's (1988) discussion of the fluidity of the self-affirmation process. Steele has argued that our "ego-protective system" is not geared towards resolving a specific threat, and thus it is possible to maintain our self-concept (to regain our desired emotional state) by reaffirming ourselves in a variety of ways. This notion has implications for the possibility that people may also use their predictions of future pleasurable feelings as a way to perhaps temporarily escape from some kind of negative situation and thus, enhance their current mood. People may imagine how good they will feel during an upcoming vacation to Florida at the end of the month while they are immersed in a boring lecture.

Affective Forecasting as a Mood-Repairing Strategy

In another study of affective forecasting that is highly pertinent to our proposal (Totterdale, Parkinson, Briner, & Reynolds, 1997), researchers examined two different

functions of mood prediction; to serve as an information source to guide our decisions, and to serve as a mood regulation process. These researchers contend that in order to be useful as an information source, people's predictions about their moods would need to be relatively accurate. For example, people may decide whether to attend an upcoming event (e.g., a friend's birthday party) based upon how enjoyable they believe the party will be. As noted previously, however, research findings in affective forecasting have typically demonstrated that people generally mispredict both the duration and intensity of their emotional reactions to various positive and negative events.

Totterdale et al. (1997) also discuss the use of mood prediction as a regulation process. They suggest that people could use their affective predictions concerning how they believe they might feel in response to a particular negative future event, to determine whether they should attempt to alter their behaviour during or after the unpleasant experience in order to minimise the event's emotional impact. They also note the possibility that a person could use predictions about their moods "as a regulation strategy for enhancing mood". They suggest that this mood-enhancing possibility would involve people making forecasts that were more positive than their current mood. Finally, another way that mood prediction may function as a regulation process comes from the possibility that people's mood predictions may influence their actual emotional experience of the event. Research has demonstrated that people's predictions of an upcoming vacation affected their subsequent ratings of the experience (Klaaren, Hodges, & Wilson, 1994). If it were possible for people to ensure that they could experience their desired emotional reactions to future positive events simply by generating overly optimistic affective forecasts, then not only could this tendency become a learned behaviour but it might also help explain people's typical tendency to overestimate the emotional impact that positive future events may bring. It is less clear how this relates to

people's tendency to also overestimate the impact that negative events may have upon them.

In the Totterdale et al. (1997) study, participants completed a set of rating scales measuring three positive emotions (cheerfulness, alertness, calmness), three times a day (start, during, end) as well as at the beginning of each week over the course of a two-week period. They also predicted their moods for the upcoming week and, at the start of each day, predicted their moods for the upcoming day. The results indicated support for the mood regulation perspective of mood prediction. Participants not only typically generated inaccurate forecasts, but there was an association between predicted and actual improvements of mood. Mood prediction also seemed to moderate the relation between participants' daily experienced hassles and their actual moods. In addition, participants tended to make optimistic predictions (e.g., more positive than their current moods) concerning how cheerful and alert they would feel at the end of the day (even though the majority of participants actually underestimated their eventual levels of cheerfulness, alertness, and calmness as they had reported at the end of the day). Totterdale et al. (1997) reasoned that these optimistic forecasts may have been "used as part of a positive-thinking strategy for enhancing mood".

In sum, the literature to date suggests two possible effects of people's current moods on their affective forecasts. Several theorists have proposed that people experiencing negative moods tend to generate relatively negative affective forecasts (Gilbert et al., 2000a; Loewenstein et al., 2000; Loewenstein & Schkade, 1999). Some recent research suggests, however, that people experiencing negative moods may generate relatively positive forecasts (Wilson et al., 2001; Totterdale et al., 1997). We believe that both of these effects may occur under different circumstances, and that it is important to identify moderating factors that determine whether mood congruent or mood

incongruent effects are obtained. One factor that may moderate the effects of mood on

affective forecasts is suggested by previous research examining mood and memory.

Moderating Effects of Mood Focus: Reflection vs. Rumination

A number of social psychological researchers have attempted to discover how

negative mood states affect people's memories of past events. The majority of research

has shown that negative moods tend to prime the recall of negative memories (mood

congruent recall), serving to exacerbate one's current distress (for reviews, see Blaney,

1986; Morris, 1989; Singer & Salovey, 1988). Such findings have been explained by the

notion that an individual's current mood automatically activates the recall of similarly

valenced memories through a process of spreading activation (Bower, 1981).

Occasionally, however, research has shown the opposite pattern of results (mood

incongruent recall). Specifically, people experiencing bad moods have reported more

positive recollections of past events than people experiencing either neutral or positive

emotional states (e.g., Parrot & Sabini, 1990). These findings have generally been

attributed to motivational forces; people may recall positive memories to improve or

repair their moods.

In an attempt to understand the inconsistency in the data, McFarland and Buehler

(1998) conducted a series of studies which examined the mood-memory relationship but

also focussed on the possible moderating effects of self-focussed attention. In particular,

two contrasting types of self-focussed attention (reflection vs. rumination) were

compared to examine their influence on the positivity of people's memories. A reflective

orientation can be described as a willingness to acknowledge one's mood with the belief

that one's mood can be controlled whereas a ruminative orientation can be thought of as

the tendency to dwell passively on one's experience. In one of the studies, participants

were first subjected to undergo either a negative or a neutral mood manipulation.

Immediately following the mood manipulation, participants underwent a mood focus manipulation whereby half the participants were subtly led to adopt a reflective orientation to their moods while the other half of the participants were influenced to adopt a ruminative focus. All participants were then asked to recall memories concerning their high school years and the positivity of their memories was subsequently analysed.

Results indicated that individuals who were led to focus on their moods in a reflective manner recalled significantly more positive memories following a negative mood induction than after a neutral mood induction. Conversely, individuals who adopted a ruminative orientation to their moods recalled significantly less positive memories of their high school days following a negative mood induction than a neutral mood induction. This finding suggests that it is the manner in which an individual focusses on his or her mood that dictates the nature of the recall to follow. People who adopt a reflective focus to their negative moods may be especially likely to use one of the various mood-repairing strategies.

Present Research

In the present research we extend the research on mood and mood focus to the realm of affective prediction. The main purpose of the research is to assess whether people's affective forecasts are shaped by motivational forces. Specifically, we sought to determine whether people who are more motivated to improve their current mood tend to generate more positive affective forecasts. An initial study tested this proposal by varying mood and mood focus using the same paradigm used by McFarland and Buehler (1998). On the basis of the previous findings using this paradigm, we hypothesised that participants in the negative mood condition who adopted a reflective focus on their feelings would generate more positive affective predictions than either similarly focussed participants in the neutral mood condition, or participants in the negative mood condition

who adopted a ruminative focus on their feelings. In addition, after participants generated their affective forecasts, we assessed their current moods. It was hypothesised that within the negative mood condition, participants who adopted a reflective mood focus (and thus were expected to generate relatively positive predictions) would report more positive current moods than participants who adopted a ruminative mood focus. A second study was performed to replicate the findings from Study 1 and extend them in several directions.

Method

Participants

The participants were 118 undergraduate students (86 female and 32 male) enrolled in introductory psychology classes at Wilfrid Laurier University. They participated in groups that varied in size from one to eleven participants and received course credit in exchange for their participation.

Procedure

On arrival, participants were seated at individual cubicles and told that the purpose of the study was to examine the relations between people's personality styles and the kinds of visual imagery they have when they think about events as well as their thoughts about themselves in the future. Consistent with this cover story, the experimenter explained that participants would complete a questionnaire that assessed each of these factors. Specifically, the questionnaire asked participants to recall and visualise a particular event from their past, to make predictions about themselves in the future, and, finally, to complete a series of commonly used personality scales. Prior to completing the questionnaire, participants were assured of the anonymity of their responses. They were informed that they would seal their questionnaires in an unmarked envelope and place it in a box located at the back of the room which contained other

completed questionnaires. A cover sheet (Appendix B) attached to the questionnaire

requested demographic information from the participants (i.e., age, sex).

Manipulation of Mood

After participants had signed their informed consent forms (Appendix A), they

were given a questionnaire which began by asking them to recall and visualise a

particular event from their past. This "visual imagery task" constituted the mood

manipulation and participants were randomly assigned to either the "negative" or the

"neutral" mood conditions. Participants in the negative mood condition were asked to

recall a negative event ("think back over the past two years and try to remember a

particularly negative and unpleasant event that happened to you") (Appendix C.1).

Participants in the neutral mood condition were asked to recall a neutral event (" think

back over the past two years and try to remember a particularly neutral or mundane event

that happened to you") (Appendix C.2). Participants were also asked to briefly describe

the event in writing and then to answer three additional questions about the event. These

three additional questions pertained to different aspects of the visual imagery task and

were answered using 9-point scales. Participants rated how positive the event was (1 =

extremely positive event, 9 = extremely negative event), how vivid their visual imagery

was while imagining the event (1 = not at all vivid, 9 = completely vivid), and the mood

they were experiencing in response to the visual imagery task (1 = extremely positive, 9

= extremely negative). Note that this last question served as the manipulation check for

the mood induction.

Manipulation of Mood Focus

Immediately following the visual imagery task, participants were randomly

assigned to one of three "mood focus" conditions ("reflective", "ruminative", or "no

mood focus"). They completed a "Reactions to Imagery Task" which asked them to

reconsider how the target event (the event previously described in the visual imagery task) had affected them. This task was designed to prompt participants to think about their current mood in a particular manner, perhaps differently than the way they would naturally be inclined to focus on their feelings. Specifically, participants were presented with a 12-item list of common reactions that people often have in response to their feelings and were asked to circle the two reactions/thoughts that best captured their current reactions. The lists were varied across participants to create the three mood focus conditions. Participants in the reflective condition were presented with statements that were all indicative of a reflective orientation to one's mood (e.g., My feelings can be controlled; I find my feelings clear and easy to label; I believe I can change and improve my feelings) (Appendix D.1) whereas participants in the rumination condition were presented with statements indicative of a ruminative orientation to one's mood (e.g., My feelings are mixed and not easy to label; It isn't easy to change or improve my mood; I feel passive and fatigued) (Appendix D. 2). Participants who were assigned to the no mood focus (or control) condition were not presented with either list. This condition was included to examine how people would naturally respond, when not exposed to a particular type of mood focus. In addition, this control condition could serve to identify more precisely which particular condition has contributed to any observed differences between the reflective and ruminative conditions.

Dependent Measures

Participants were then presented with a series of commonly occurring and mildly positive future events (Appendix E) and were asked to predict how they would feel when they experienced each of these events using an eleven point scale (1 = extremely negative feelings; 6 = neutral feelings; 11 = extremely positive feelings). These affective predictions constituted the main dependent variable of the study. The target events were:

eating a nice meal, seeing friends or family members that you care about, engaging in your preferred exercise activities, drinking alcoholic beverages (or other beverages that you enjoy), watching your favourite T.V. programs, going shopping for things you have been wanting to get, having a relaxing bath or shower, successfully completing a school assignment, successfully completing a project at home (e.g., getting the house cleaned up), going to an anticipated entertainment or social event (e.g., a movie, concert, birthday party, date, etc.), spending time listening to music.

Immediately after making their affective predictions, participants were asked to indicate how making these predictions currently affected them on several mood dimensions. Using a scale ranging from 1 (not at all) to 7 (extremely), they rated the extent to which they were currently experiencing five positive emotions (happy, satisfied, pleased, proud, competent) and four negative emotions (disappointed, sad, ashamed, humiliated) (Appendix F).

Next, an additional series of prediction responses were obtained for exploratory purposes. These measures assessed participants' level of optimism concerning their futures, and were adopted from previous research (Weinstein, 1980). Participants were asked to consider ten life events that could possibly happen to them and indicate how likely it was that each event would occur for both oneself as well as an average similar other (e.g., an average university student). There were five positive events (e.g., "You will do better than expected on an upcoming exam") (Appendix G.1) and five negative events (e.g., "You will do something you regret or are embarrassed about soon") (Appendix G.2). Participants were asked to indicate how likely each event was to occur for themselves and for a similar other using a scale ranging from 0 (extremely unlikely) to 10 (extremely likely).

All participants were then asked to fill out a series of standard, commonly used personality scales. These measures could be used to assess the effect of personality traits on affective forecasting, and they also provided support for the cover story which ostensibly set out to examine how certain personality types affected people's thoughts about themselves and their futures. The personality scales selected for inclusion within the questionnaire were (in order of presentation), the Rosenberg Self-Esteem Scale (1969) (Appendix H), Beck Depression Inventory (1961) (Appendix I), a measure of rumination (Nolen-Hoeksema, 1994) (Appendix J), a trait meta-mood scale (Salovey & Mayer, 1990) (Appendix K), and a measure of Reflection/Rumination (Trapnell & Campbell, 1999) (Appendix L). When participants had completed their questionnaires, they were thoroughly debriefed and thanked for their participation [1].

Results

Manipulation check. As a check of the effectiveness of the mood manipulation, we submitted participants' ratings of how they were feeling immediately after the visual imagery task to an analysis of variance (ANOVA). Participants were feeling significantly more negative emotions in the negative mood condition ($M = 6.73$) than in the neutral mood condition ($M = 4.34$), $F(1, 116) = 63.27, p < .001$, and thus, the mood manipulation was successful. Participants also rated the pleasantness of their target event and consistent with the results above, rated their events significantly more negative in the negative mood condition ($M = 7.76$) compared to the neutral mood condition ($M = 4.41$), $F(1, 116) = 144.39, p < .001$. Furthermore, participants tended to report experiencing more vivid imagery during the visual imagery task in the negative mood condition ($M = 7.17$) than in the neutral mood condition ($M = 6.56$), $F(1, 116) = 3.04, p = .08$.

Effects of mood and mood focus on predicted feelings. Initially we created an index of the positivity of participants' predicted feelings. The index was created by

averaging across seven of the original eleven items (Appendix M). This subset of items was selected because it was used in another study on this topic conducted recently in our lab, and the present study is an extension of that original study. The same set of items was selected for analysis to maintain consistency with the previous study. In the present study, the reliability of the 7-item index was moderate (Cronbach's a = .66), and comparable to the reliability of an index including all eleven items (Cronbach's a = .71). It is worth noting that the pattern of results obtained in the present study is virtually identical when analyses are based on an index including all 11 items.

Recall that we predicted that participants in the negative mood condition who adopted a reflective focus on their feelings would generate more positive affective predictions than either similarly focussed participants in the neutral mood condition, or participants in the negative mood condition who adopted a ruminative focus on their negative feelings. We submitted our measure of participants' predicted feelings to a 2 (mood: neutral, negative) X 3 (mood focus: reflective, ruminative, control) ANOVA. The analysis yielded a significant interaction, F (2, 112) = 7.93, p = .001. Group means appear in Table 1. As predicted, analysis of simple effects revealed that reflectors reported significantly more positive affective predictions in the negative mood condition (M = 8.89) than in the neutral mood condition (M = 8.21), t (112) = 2.29, p < .05. In contrast, ruminators generated significantly more positive predictions in the neutral mood condition (M = 9.14) than in the negative mood condition (M = 8.20), t (112) = 3.22, p < .05. In the control mood focus condition, predictions did not differ significantly in the negative mood condition (M = 8.59) and the neutral mood condition (M = 8.42), t (112) < 1, although the pattern of means was consistent with a mood incongruency effect.

Also as expected, among participants in the negative mood condition, reflectors (M = 8.89) generated significantly more positive affective forecasts than did ruminators

($M = 8.20$), t (112) = 2.36, $p < .05$, although neither of these two mood focus groups

differed significantly from control participants t (112) < 1. The opposite pattern of results

occurred among participants in the neutral mood condition. Participants adopting a

ruminative mood focus made significantly more positive affective predictions ($M = 9.14$)

than participants adopting a reflective mood focus ($M = 8.21$), t (112) = 3.22, $p < .01$, or

participants in the control condition ($M = 8.42$), t (112) = 2.46, $p < .05$. No other groups

differed significantly from one another in terms of the positivity of their affective

predictions.

Immediately following their predictions of future feelings, participants were asked

to indicate how the opportunity to make affective forecasts made them feel on nine

different mood dimensions (five positive, four negative). A separate index was created

for the positive items (Cronbach's $a = .88$) and the negative items (Cronbach's $a = .85$).

A 2 (mood: neutral, negative) X 3 (mood focus: reflective, ruminative, control) ANOVA

performed on the positive item index yielded a marginally significant interaction, F

(2,111) = 2.58, $p = .08$. Consistent with the hypothesis, planned contrasts revealed that in

the negative mood condition, participants reported more positive current feelings when

they adopted a reflective focus ($M = 4.83$) than when they adopted a ruminative focus (M

= 4.11), t (111) = 2.07, $p < .05$. The contrasts revealed no other significant differences

between groups (see Table 2 for means).

Discussion

The present study supported the hypothesis that people's affective forecasts can

be influenced by their current feelings, and identified a moderator of these effects. A

significant interaction effect indicated that participants' affective forecasts were affected

jointly by their moods and how they were focussed on those moods. Specifically,

participants exposed to the negative mood condition who were led to adopt a reflective

mood focus (characterised by a willingness to acknowledge one's mood coupled with the

belief that one's mood can be controlled) generated significantly more positive affective

predictions to future positive events than did participants in the same mood condition

who were led to adopt a ruminative mood focus (characterised by the tendency to dwell

passively on their negative experience). In contrast, participants exposed to the neutral

mood condition who were led to adopt a ruminative focus generated significantly more

positive affective predictions than those who were led to adopt a reflective focus. In sum,

reflectors generated mood incongruent predictions (i.e., more positive in the negative

mood condition than in the neutral mood condition) whereas ruminators generated mood

congruent predictions (i.e., more positive in the neutral mood condition than in the

negative mood condition).

The predictions of participants in the negative mood condition who did not

undergo a mood focus manipulation (control group), fell, on average, in between the

scores of the reflective and ruminative groups also subjected to the negative mood

condition, although differences between the control group and either of the other two

mood focus groups were not significant. Of note however, and consistent with a

motivational account, control participants made more positive affective predictions in the

negative mood condition than in the neutral mood condition, although this difference was

again not statistically significant.

Also consistent with the motivational account, was the fact that reflectors made

significantly more positive affective predictions in the negative mood than in the neutral

mood condition. This finding suggests that participants experiencing a negative mood

may have been motivated to alleviate the discomfort caused by the negative mood

induction. A plausible opportunity to do so may have come with the chance to generate

affective predictions to some upcoming mildly positive events. In fact, results indicated

that when participants in the negative mood condition were armed with a reflective mood focus, the opportunity to make predictions about their future feelings to positive events actually made them feel better soon afterwards in comparison with participants in the same mood condition who were led to adopt a ruminative mood focus. Thus, it appears as though the act of engaging in affective forecasts (at least as far as positive future events are concerned) may be yet another cognitive strategy that people use when they are motivated to improve their current feelings.

Mood congruent affective predictions were evidenced by ruminators, who interestingly generated the most positive affective predictions in the neutral mood condition. Conceivably, dwelling on a somewhat positive mood (according to the reports of participants in the neutral mood condition following their visual imagery task) may have had the effect of priming positive expectations for the future.

The present findings shed further light on previous studies examining the effects of mood on affective forecasts. The previously mentioned Wilson et al. (2001) study first provided evidence (albeit indirectly) for the notion that people's current moods may affect the manner in which they generate their predictions of future feelings. Specifically, they demonstrated that participants subjected to the negative feedback condition made qualitatively different affective predictions to both future positive and negative events in comparison with participants in either the positive or no feedback conditions. In addition, negative experiencers also engaged in significantly more rationalisation than participants in the positive feedback group. The researchers therefore, attempted to explain the more moderate affective forecasts of negative experiencers to negative future events by claiming that participants had generated them with their new reconstrual of the test in mind. Since negative experiencers had denigrated the test on several aspects, they could very well have believed that a future failure would be less devastating than they

originally predicted, prior to feedback. This rationalisation explanation however, does not adequately explain why these negative experiencers generated relatively positive affective predictions to performing well on future similar tests that they had previously claimed were both invalid and unimportant.

Our findings suggest that the observed mood incongruent pattern of affective predictions in the Wilson et al. (2001) study may have reflected the mood prediction "as a mood regulation process" previously discussed by Totterdale et al. (1997). In this instance, negative experiencers may have been attempting to alleviate their current distress by claiming that they would be relatively less negatively affected by future negative events while at the same time claiming that future positive events would be relatively positive in comparison with the other conditions. Previous work on contrast effects demonstrates a similar finding, whereby predictions of negative experiencers were in fact even more positive than the actual reports of positive experiencers (Meyers, Wilson, & Gilbert, 2000). Rather than attempting to explain these findings by means of differences in rationalisation, it is possible that the negative experiencers in the Wilson et al. study exhibited a general motivation to improve their current moods.

It is also interesting to note that the results of the present study, as well as the results of the Wilson et al. (2001) study stand in direct contrast to theorists' suspicions regarding how people's current moods may influence the way in which people forecast their future affective states. Although rarely discussed, it seemed to be the consensus amongst researchers that people would likely predict their future feelings in a manner congruent with their existing moods (Gilbert et al., 2000a; Loewenstein, O'Donoghue, & Rabin, 2000; Loewenstein & Schkade, 1999).

Study 2

Study 1 provided evidence that people's current moods can influence the way in which they generate affective forecasts. Similar to findings from an earlier study on mood and memory (McFarland & Buehler, 1998), it seems that exactly how people's current moods influenced their predictions of future feelings depended upon the precise manner in which they were focussed on their current affective states. Specifically, participants in the negative mood condition who were led to adopt a reflective focus generated relatively positive affective predictions to various mildly positive events compared with participants in the same mood condition who were led to adopt a ruminative focus. This pattern of findings is consistent with the view that reflectors were motivated to alleviate their current negative feelings by imagining a positive future.

Valence of Events

One limitation of Study 1 stems from the fact that participants were never asked to make affective predictions for negative events. Whether participants who were exposed to a negative mood manipulation, and led to adopt a reflective focus, would also generate mood incongruent affective forecasts for a collection of negative events remains to be seen. Study 2 addresses this issue by varying the valence of the predicted events following the visual imagery task.

Study 1 provides us with an indication as to what should be expected when participants have the opportunity to make predictions about future positive events, but as far as what might happen when participants are asked to predict for negative events, we look elsewhere. The Wilson et al. (2001) study, provides some indirect evidence as to what may likely be the response of participants in the negative mood condition when they are given the opportunity to generate affective forecasts to negative events. Recall that participants in the Wilson et al. study who first received negative test feedback (negative

experiencers) predicted that they would be less affected by another failure on a similar test in the future compared with forecasters, purportedly because they changed their original construal of the test, and came to see it as less valid and significant than they had previously. In addition, Study 1, as well as a collection of studies conducted by McFarland and Buehler (1998) have demonstrated that people's responses to distress may depend upon how they are focussed on their feelings. On the basis of these previous findings, it was hypothesised that participants in the negative mood condition would make less negative affective predictions concerning future negative events when they adopt a reflective mood focus compared to when they adopt a ruminative mood focus.

Inclusion of the negative events in Study 2 not only extends the generalisability of the findings, but also addresses a potential alternative explanation. Although the manipulation prompted some participants to generate more positive affective forecasts than others, these effects may have been an artefact of effects concerning extremity. That is, in predictions for positive events, the extremity and positivity of the predictions are confounded, as more extreme predictions are also more positive. In predictions for negative events, extremity and positivity are not confounded, as more extreme predictions are more negative. Conceivably, the mood and mood focus manipulations altered the extremity of people's predictions, and since the predictions concerned positive target events in this case, it happened to result in increased positivity. According to this extremity account, we should expect that conditions that prompt the most positive predictions for positive events would prompt the most negative predictions for negative events.

Temporal Proximity of Events

In addition, Study 2 seeks to examine the effects of varying the temporal distance of the events for which participants generate affective predictions. This addition to Study

2 is largely exploratory and two opposite effects may be equally likely, at least as far as affective predictions for positive events are concerned. A consideration of the influence of motivational forces suggests that participants exposed to a negative mood manipulation may be relatively eager to imagine how pleasantly they would experience a near future (e.g., the same day, tomorrow) positive event. Should the opportunity to experience the same positive event occur in the distant future (e.g., a month away) then the desire to imagine that particular event positively may be less strong and the affective predictions less positive.

On the other hand, more cognitively based research examining the effects of the temporal proximity of events on people's optimism (Gilovich, Kerr, & Medvec, 1993; Liberman & Trope, 1998; Savitsky, Medvec, Charlton, & Gilovich, 1998) suggests quite different hypotheses. Typically, this research indicates that people become less optimistic about an event as it approaches. For example, students expect to perform better on a midterm exam when they predict their performance on the first day of classes compared to the day of the examination (Gilovich et al., 1993). Similarly, Liberman and Trope (1998) have demonstrated that people often think differently about the same event depending upon how far away it is. For example, when participants were asked to consider events that were scheduled to occur relatively soon, they focussed on the event's feasibility rather than the event's desirability. In contrast, when people considered more distant events, they focussed more on the event's overall desirability and less upon issues of feasibility.

Therefore, participants may predict that positive events in the distant future will be more enjoyable because they are focussed exclusively on the desirability of these events without concern for their feasibility. For near events they are more inclined to consider other concerns and duties that may deter from their enjoyment of the target

event. It is also possible, that in addition to these more common concerns pertaining to the events' feasibility, participants in the negative mood condition may also feel that it is even less feasible that they will be able to have an enjoyable experience in response to a positive future event when that event is to occur very soon rather than in the distant future. If this is the case, then amongst participants in the negative mood condition, ruminators may believe that it is even less feasible to have an enjoyable experience in the near future compared with reflectors who may feel more ready and willing to attempt to alleviate their current distress. As the timing of the positive future event becomes more distant, differences between the affective predictions of the two mood focus groups should be minimised, as even ruminators might believe that, although they are currently distressed, the distant future may yet become brighter.

It is interesting to note, however, that should reflectors in the negative mood condition generate more positive affective predictions to near positive events than to the same events scheduled to occur in the distant future, this finding lies in contrast to the cognitively based research on people's optimism mentioned above. At the same time, it also strengthens the case that people's affective forecasts may, at times, reflect motivational considerations.

Self-esteem and Affective Forecasting

Another factor that may moderate the effects of negative moods on affective forecasting is self-esteem. Previous research on affective forecasting has not yet examined the way differential levels of self-esteem may influence people's predictions concerning their future affective states.

It is important to note that differences between high self-esteem individuals (HSE) and low self-esteem individuals (LSE) individuals have typically been more consistent and pronounced after experiencing negative feedback compared with positive

feedback (e.g., Blaine & Crocker, 1993; Brown & Dutton, 1995; Campbell, 1990). For example, in a review of the relevant literature, Blaine and Crocker suggest that in the face of negative feedback, HSE individuals are more likely to exhibit both self-enhancing and self-protective biases while LSE individuals are more apt to self-deprecate. They also note that HSE individuals tend to exhibit more self-serving biases in their attributions compared to LSE individuals. Similarly, HSE individuals exhibit a stronger tendency to attribute success to their internal qualities (e.g., intelligence, work ethic) and their failures to various external sources (e.g., testing conditions, fatigue) than do LSE individuals (Ickes & Layden,1978). Additionally, research has shown that HSE individuals behave more self-defensively after experiencing negative feedback than LSE individuals did (Marecek & Mettee, 1972).

Research concerning several other cognitive strategies that people may use as a means of alleviating discomfort (e.g., positive illusions, contrast effects, compensatory reactions, temporal comparisons) may provide us with an indication of the role that self-esteem can play in moderating affective forecasts (e.g., Beauregard & Dunning, 1998; Brown & Smart, 1991; Ross & Wilson, 2002; Taylor & Brown, 1988). For example, Taylor and Brown (1988) have shown that HSE individuals exhibit a higher degree of positive illusions about themselves (e.g., self-perceptions, performance evaluations, future success) compared to LSE individuals after receiving negative feedback. The greater self-perceptions of HSE individuals seem to enhance their more optimistic predictions of future success on a task, even when a prior performance on the same task should suggest otherwise.

Another way people have been shown to cope with negative performance feedback is through compensatory self-enhancement. For example, Brown and Smart (1991) demonstrated that in response to negative feedback on a test concerning one

particular aspect of the self (intelligence), HSE individuals were more likely than LSE

individuals to exaggerate their worth in other areas (e.g., interpersonal skills). Similarly,

recent research on temporal self-appraisal theory has shown that, in a motivated attempt

to feel better, HSE individuals exhibited a greater distancing bias from a former

unfavourable self than did LSE individuals (Ross & Wilson, 2002).

Beauregard and Dunning (1998) examined literature on contrast effects and

contended that many of the previous findings (originally viewed from a cognitive

standpoint) could also be explained by the existence of motivational forces. In their first

study, participants were assigned to receive either positive or negative feedback

following completion of either an easy or a difficult task, respectively. Participants were

then asked to rate a hypothetical undergraduate student on intelligence. Participants who

received negative feedback displayed a greater egocentric contrast in their decision

making than participants who had experienced success. That is, their evaluation of the

hypothetical student (based upon the test score) was more negatively related to their own

score when their self-esteem was threatened than when it was enhanced. A second study

examined whether differences existed in the tendency to display contrast effects between

HSE and LSE individuals. Although no differences between the self-esteem groups were

revealed following positive feedback, HSE individuals displayed significantly more

egocentric contrast in their judgements of the hypothesised student than LSE individuals

following negative feedback.

The studies above regarding cognitive strategies that people may use to alleviate

negative self-relevant feelings, provide good reason to believe that an asymmetry of

differences may also exist between HSE and LSE individuals in the manner in which they

generate affective forecasts. Specifically, HSE individuals who experience a negative

mood induction should be particularly likely to increase the positivity of their predictions

to positive events while at the same time underestimating how unpleasant future negative events will be experienced, in an attempt to improve their current feelings.

To summarise, in Study 2 we sought to replicate and extend the findings of Study 1. Our main hypothesis, as in Study 1, was that mood and mood focus would interact to affect participants' affective forecasts. Specifically, we predicted that participants who adopted a reflective focus would generate more positive affective predictions in the negative mood condition than in the neutral mood condition, whereas participants who adopted a ruminative focus would generate more positive affective predictions in the neutral mood condition than in the negative mood condition. We hypothesised that this pattern of effects would generalise across predictions for both positive and negative events. That is, the conditions that prompt more positive predictions for positive events should also prompt more positive predictions (i.e., less negative predictions) for negative events.

We also hypothesised, as in Study 1, that within the negative mood condition, participants who adopted a reflective mood focus (and thus were expected to generate relatively positive predictions) would subsequently report more positive moods than participants who adopted a ruminative mood focus.

It was also hypothesised that self-esteem would interact with the mood manipulation to affect participants' affective forecasts. Specifically, on the basis of previous research examining self-esteem and self-enhancing cognitions, it was expected that participants high in self-esteem would generate more positive affective forecasts in the negative mood condition than in the neutral mood condition, whereas participants low in self-esteem would generate more positive affective forecasts in the neutral mood condition than in the negative mood condition. Participants high in self-esteem were

expected to report more positive affective forecasts than those low in self-esteem, and

this difference was expected to be especially pronounced in the negative mood condition.

We did not generate specific hypotheses concerning the temporal distance factor,

but included it to see if it would moderate the hypothesised effects. We also did not have

any hypotheses concerning three-way (or higher level) interaction effects.

Method

Participants

The participants were 157 undergraduate students (45 males and 112 females)

enrolled in introductory psychology classes at Wilfrid Laurier University[2]. They

participated in group sessions (with a maximum number of 20 students per session) and

received course credit for their participation. One hundred thirty-one of the participants

had previously completed the Rosenberg Self-Esteem Scale in mass testing sessions

conducted in the introductory psychology classes.

Procedure

The procedure for the main experiment was very similar to the procedure used in

Study 1, with a few modifications. The majority of changes were incorporated in the

dependent measures, which are described below.

On arrival, participants were seated at individual cubicles and were told that the

purpose of the study was to examine the relations between people's personality styles, the

kinds of visual imagery they have when they think about various kinds of events, as well

as their thoughts about themselves in the future. Consistent with this cover story, the

experimenter notified the participants that they would be completing a questionnaire that

asked them to recall and visualise a particular event from their past, to make predictions

about themselves in the future, and, finally, to complete a series of commonly used

personality scales. Prior to handing out the questionnaire, the experimenter assured

participants that their responses would be kept completely anonymous and confidential

and obtained informed consent (Appendix N). Demographic information (i.e., age, sex)

was collected in a cover sheet (Appendix O) at the beginning of the questionnaire.

Manipulation of Mood

To manipulate mood, we used the same visual imagery task used in Study1,

which asked participants to recall and visualise a particular event from their past.

Participants were randomly assigned to either the "negative" or the "neutral" mood

conditions. Participants in the negative mood condition were asked to recall a negative

event ("think back over the past two years and try to remember a particularly negative

and unpleasant event that happened to you") (Appendix P.1). Participants in the neutral

mood condition, were asked to recall a neutral event ("think back over the past two years

and try to remember a particularly neutral or mundane event that happened to you")

(Appendix P.2). Participants were asked to briefly describe the event in writing and then

answer three additional questions about the event. Using nine point scales, participants

rated how positive the event was (1 = extremely positive event, 9 = extremely negative

event), how vivid their visual imagery was while imagining the event (1 = not at all vivid,

9 = completely vivid), and the mood they were experiencing in response to the visual

imagery task (1 = extremely positive, 9 = extremely negative). This last question served

as the manipulation check for the mood induction.

Manipulation of Mood Focus

Immediately following the visual imagery task, participants were randomly

assigned to one of two "mood focus" conditions: reflective focus or ruminative focus.

Although Study 1 had included a control condition (no mood focus), this condition was

omitted from the current study to reduce the number of participants required. In order to

manipulate mood focus, participants completed a "Reactions to Imagery Task" which

asked them to consider how the event they described in the visual imagery task had affected their feelings. This task was designed to prompt participants to think about their current mood in a particular manner, perhaps differently than the way they might be naturally inclined to do so. Specifically, the task presented participants with a 12-item list of common reactions that people often have in response to their feelings and asked them to circle the two reactions/thoughts that best captured their current reactions. The lists were varied to create the two mood focus conditions. Participants in the reflective condition were presented with statements that were indicative of a reflective orientation to one's mood (e.g., My feelings can be controlled, I find my feelings clear and easy to label, I believe I can change and improve my feelings; see Appendix Q.1) whereas participants in the rumination condition were presented with statements indicative of a ruminative orientation to one's mood (e.g., My feelings are mixed and not easy to label, It isn't easy to change or improve my mood, I feel passive and fatigued; see Appendix Q.2).

Dependent Measures

The major differences between Study 1 and Study 2 occurred within the items assessing participants' affective forecasts. The first change was the inclusion of a within-subject manipulation of "event valence". In addition to predicting their future reactions to a series of seven mildly positive future events (those analysed in Study 1), participants were asked to make affective forecasts for seven negatively valenced events. For both types of events, participants reported their affective predictions using an eleven point scale (1 = extremely negative feelings; 6 = neutral feelings; 11 = extremely positive feelings). The negative and positive events were presented in counterbalanced order.

The present study also included a manipulation of the temporal distance of the target events, that is, how far in the future the events would be occurring. Participants

were randomly assigned to either the *near* or *distant* condition. Participants in the near condition were asked to imagine that the 7 positive and 7 negative events would be taking place over the next couple of days (Appendix R.1 & S.1) while those in the distant condition were asked to imagine that the events would occur in about a month's time (Appendix R.2 & S.2).

From this point on, the procedure and materials were the same as those used in Study 1. Immediately after making their affective predictions, participants were asked to indicate how the opportunity to make their affective predictions had affected them on several mood dimensions. Using a scale ranging from 1 (not at all) to 7 (extremely), participants rated the extent to which they were currently experiencing five positive emotions (happy, satisfied, pleased, proud, competent) and four negative emotions (disappointed, sad, ashamed, humiliated) (Appendix T).

Finally, as in Study 1 (see appendices G.1 through L), all participants were asked to fill out a measure of optimism (Weinstein, 1980) for positive events as well as for negative events, and the following personality measures: self-esteem (Rosenberg, 1969), depression (Beck, 1961), rumination (Nolen-Hoeksema, 1994), trait meta-mood (Salovey & Mayer, 1990), and Reflection/Rumination (Trapnell & Campbell, 1999) [3]. Upon completion of the questionnaires, participants were thoroughly debriefed and thanked for their participation.

Results

Manipulation check. As a check of the effectiveness of the mood manipulation, we submitted participants' ratings of how they were feeling immediately after the visual imagery task to a 2 (mood: negative, neutral) X 2 (mood focus: reflective, ruminative) ANOVA. Participants reported feeling significantly more negative emotions in the negative mood condition ($M = 6.70$) than in the neutral mood condition ($M = 4.47$), F (1,

153) $= 87.31, p < .001$, and thus, as in Study 1, the mood manipulation was effective. Participants' ratings of the pleasantness of the target event and the vividness of the imagery were also submitted to separate ANOVAs. Participants rated their events as significantly more unpleasant in the negative mood condition ($M = 8.04$) compared to the neutral mood condition ($M = 4.42$), $F (1, 153) = 245.68, p < .001$. Furthermore, participants tended to report experiencing more vivid imagery during the visual imagery task in the negative mood condition ($M = 7.25$) than in the neutral mood condition ($M = 6.75$), $F (1, 153) = 2.93, p = .09$.

Predicted feelings. In order to test the main hypothesis, we first created two indices of the positivity of participants' affective predictions. The index for positive events was created by averaging across the predictions for the seven positive events (Cronbach's $a = .66$). The index for negative events was created by first reverse scoring the predictions and then averaging across them (Cronbach's $a = .66$). Thus, for both positive and negative events, higher scores indicate more positive affective predictions. Preliminary analyses indicated that there were no significant effects involving the order of the predictions for positive and negative events, therefore all analyses were collapsed across this factor.

We submitted the prediction indices to a 2 (mood: negative, neutral) X 2 (mood focus: reflective, ruminative) X 2 (temporal distance: near future, distant future) X 2 (event valence: positive, negative) mixed model ANOVA. Event valence was a within subject factor and the remaining factors were between subject factors. Means for the full analysis are presented in Table 3.

Our primary hypothesis involved a significant interaction between mood and mood focus. Specifically, we predicted that participants who adopted a reflective focus on their feelings would generate more positive affective predictions in the negative mood

condition than in the neutral mood condition. Participants who adopted a ruminative focus on their feelings were not expected to exhibit this pattern of mood incongruent predictions. Consistent with the hypothesis, the analysis yielded a significant interaction between mood and mood focus, $F(1, 149) = 5.21$, $p = .02$. The means for this interaction are presented in Table 4 (note that these means are generally lower than those in Table 1 because the present means include predictions for both positive and negative events). Reflectors made slightly more positive affective forecasts in the negative mood condition ($M = 5.80$) than in the neutral mood condition ($M = 5.72$), although this *a priori* contrast was not significant, $t(146) = .54$, *ns*. In contrast, ruminators made marginally less positive affective forecasts in the negative mood condition ($M = 5.65$) than in the neutral mood condition ($M = 5.91$), $t(149) = 1.75$, $p = .08$.

Next, we examined whether the hypothesised effects of mood and mood focus differed for predictions concerning the positive and negative events. Although event valence did not interact significantly with the other factors, we believed it was important, in light of our aim to replicate the findings of Study 1, to examine the means separately for the positive and negative events. The relevant means for the positive events are displayed in Table 5. Contrasts performed on these means indicated that both reflectors and ruminators exhibited mood congruent predictions. That is, contrary to the hypothesis, reflectors made less positive predictions in the negative mood condition ($M = 8.39$) than in the neutral mood condition ($M = 8.76$), $t(149) = 2.52$, $p = .012$. Similarly, ruminators made less positive predictions in the negative mood condition ($M = 8.16$) than in the neutral mood condition ($M = 8.80$), $t(149) = 4.38$, $p < .001$.

For negative events, the pattern of means was more consistent with the hypothesis (see Table 6). As expected, reflectors made significantly more positive affective forecasts in the negative mood condition ($M = 3.21$) than in the neutral mood condition ($M = 2.67$),

t (149) = 3.67, $p < .001$. The predictions of ruminators did not differ between the negative

mood condition ($M = 3.14$) and the neutral mood condition ($M = 3.01$), t (149) = .89, ns.

Our main analysis also revealed a three-way interaction involving temporal

distance, event valence and mood, F (1, 153) = 6.03, $p = .015$. Means for this interaction

are presented in Table 7. Although we had included the temporal distance variable largely

for exploratory purposes, and therefore, did not make any definite predictions, an

interesting pattern surfaced. Specifically, when predicting reactions to positive events,

participants in the negative mood condition (both reflectors and ruminators) made more

positive predictions when the target events occurred in the near ($M = 8.43$) rather than the

distant future ($M = 8.13$), t (149) = 2.01, $p = .05$. In contrast, the opposite pattern of

predictions tended to occur for participants in the neutral mood condition, whereby,

participants tended to make more positive predictions when the target events were in the

distant future ($M = 8.92$) than in the near future ($M = 8.66$), t (149) = 1.74, $p = .08$.

When participants were asked to predict their reactions to negative events,

participants in the negative mood condition showed the opposite pattern of predictions

compared to their predictions for positive events. Specifically, participants in the negative

mood condition predicted more positive reactions when the target events were in the

distant future ($M = 3.35$) rather than the near future ($M = 2.98$), t (149) = 2.57, $p = .01$.

No differences however, existed between participants in the neutral mood condition

regardless of whether the negative events were in the near future ($M = 2.86$) or the distant

future ($M = 2.81$), t (149) = 0.34, ns.

To assess the influence of self-esteem on people's affective predictions, we then

submitted the prediction indices to a 2 (mood: negative, neutral) X 2 (mood focus:

reflective, ruminative) X 2 temporal distance (near, distant) X 2 event valence (positive,

negative) X 2 (self-esteem: high, low) ANOVA. There was a significant interaction

between self-esteem and mood, $F(1, 140) = 4.58$, $p = .03$, that was partially consistent with the hypothesis (see Table 8). As expected, LSE individuals exhibited mood congruent predictions as they generated significantly more positive predictions in the neutral mood condition ($M = 5.91$) than in the negative mood condition ($M = 5.63$), $t(140) = 2.23$, $p = 0.01$. HSE individuals did not exhibit the expected mood incongruent pattern of predictions: instead, they generated approximately equivalent predictions in both the negative mood condition ($M = 5.78$) and in the neutral mood condition ($M = 5.74$), $t(140) = .41$, ns. Within the negative mood condition, HSE individuals ($M = 5.78$) tended to generate more positive predictions than LSE individuals ($M = 5.63$), however contrary to the hypothesis this difference was not significant, $t(140) = .64$, ns.

Unexpectedly, another significant interaction was revealed involving self-esteem and mood focus, $F(1, 140) = 4.74$, $p < .01$. Amongst LSE individuals, reflectors ($M = 5.87$) tended to generate more positive predictions than ruminators ($M = 5.67$), $t(140) = 1.40$, $p = 0.08$. Amongst HSE individuals however, the opposite pattern was revealed as ruminators ($M = 5.86$) tended to generate more positive predictions than reflectors ($M = 5.66$), $t(140) = 1.40$, $p = 0.08$.

Mood after prediction. We next examined participants' ratings of how the opportunity to make affective forecasts made them feel. A separate index was created for the five positive items (Cronbach's $a = .82$) and the four negative items (Cronbach's $a = .80$). A 2 (mood: neutral, negative) X 2 (mood focus: reflective, ruminative) ANOVA performed on the positive item index did not yield any significant interaction, $F(1,155) = .003$, ns. Similarly, no significant interaction was found for the negative item index, $F(1, 155) = .203$, ns. Means for these analyses are presented in Table 9.

Discussion

The results of the study were only partially consistent with the hypotheses. As expected, participants' affective predictions were again influenced jointly by both their moods and how they were focussed on their moods. For predictions concerning negative events, the pattern of effects offered partial support for the hypotheses. Specifically, reflectors exhibited the hypothesised pattern of mood incongruency as they generated significantly less negative (i.e., more positive) predictions in the negative mood condition than in the neutral mood condition. However, ruminators did not exhibit the hypothesised mood congruent pattern; instead, their predictions did not differ significantly across the negative and neutral mood conditions.

When predictions concerned future positive events, the findings from Study 1 were not replicated. Ruminators exhibited the hypothesised pattern of mood congruency, that is, they generated more positive affective predictions in the neutral mood condition than in the negative mood condition. However, reflectors did not exhibit the hypothesised pattern of mood incongruency in their affective predictions; instead, they also predicted significantly more positive predictions in the neutral mood condition than in the negative mood condition.

Taken together, these findings are partially consistent with the hypotheses. Notably, reflectors were the only group to generate mood incongruent affective predictions, when making predictions for future negative events. And for positive events, the reflectors exhibited a pattern of mood congruent predictions that was at least less pronounced than that exhibited by ruminators. In general, the pattern of predictions amongst reflectors suggests that motivational forces may have been counteracting the more general tendency to generate mood congruent predictions; these individuals appeared determined to improve their current negative feelings. The pattern of mood

congruent predictions, shown especially by the ruminators, may instead be explained by notions of priming and spreading activation (Bower, 1981).

Although the overall pattern of findings was not moderated significantly by the valence of the events, it appeared to be most pronounced for the negative events. This finding builds on the results of Study 1 to indicate that the effects of mood and mood focus are not limited to thoughts about positive events. Additionally, the present study's findings are somewhat similar to the results from the previously mentioned study by Wilson et al. (2001), who demonstrated that participants subjected to negative feedback made less negative affective predictions to future negative events than did participants in the no feedback condition. In the Wilson et al. study, participants' predictions concerned future events that were the same as the mood inducing event (as well as predictions for dissimilar events), whereas in the present study participants' predictions always concerned events unrelated to the mood induction procedure.

It is also interesting to note that both the results of the present study as well as the Wilson et al. (2001) study stand in direct contrast to earlier researchers' suspicions regarding how people's current moods may influence the way in which people forecast their future affective states. Analogous to previous research on mood and memory by McFarland and Buehler (1998), whether participants in the current study exhibited mood congruency or mood incongruency in their affective predictions, seems to have depended upon how they were focussed on their current moods.

Importantly, results from the current study cannot simply be attributed to a tendency for participants in a particular condition to exhibit an extremity bias in generating their affective predictions. In the current study, participants attempting to make positive predictions to the various positive future events (or less negative predictions to the various negative future events), were forced to respond in the opposite

direction depending upon the valence of the future events for which they made predictions. The significant mood x mood focus interaction effect indicates that these manipulations affected the degree of positivity of people's affective forecasts rather than only their extremity.

Interestingly, as in Study 1, ruminators in the neutral mood condition generated the most positive affective predictions of any of the groups. Conceivably, dwelling on a somewhat positive mood (according to the reports of participants in the neutral mood condition following their visual imagery task) may have had the effect of priming positive expectations for the future.

For exploratory purposes, the present study also examined the effects of varying the temporal distance of the events for which participants generated their affective predictions. A three-way interaction between temporal distance, mood, and event valence was revealed. When generating affective predictions for positive events, participants in the negative mood condition exhibited the opposite pattern of predictions than participants in the neutral mood condition. Specifically, participants in the negative mood condition generated more positive affective predictions to positive events located in the near rather than the distant future whereas participants in the neutral mood condition expected to feel better when the same positive events were in the distant rather than the near future.

Thus, it seems that people experiencing negative moods (regardless of the way in which they were focussed on their current moods) seem to expect that they will feel better if various positive events occur sooner rather than later in the future. This result may reflect a motivation inherent in participants experiencing distress to experience the various positive events sooner in order to accelerate possible mood repair. Participants in the neutral mood condition on the other hand (who should not have been motivated to

repair their moods), exhibited a pattern of predictions consistent with previous research indicating that people become less optimistic about a particular event as the event approaches in time.

When participants were asked to predict their future feelings for various negative events, participants in the negative mood condition exhibited the opposite pattern of predictions than when they were asked to predict their affective reactions to future positive events. Specifically, they expected to experience more positive feelings (i.e., less negative feelings) when the same event was in the distant rather than the near future. Participants in the neutral mood condition, however, did not indicate a preference whether the same negative events were located in the near rather than the distant future.

The effects of temporal distance for participants in the negative mood condition generating predictions for future negative events appears to be inconsistent with a motivational interpretation. The finding suggests that the motivational hypotheses concerning temporal distance may be limited to predictions for positive events. Although it is likely that participants in the negative mood condition may have been motivated to report that they will be less negatively affected by various negative events than participants in the neutral mood condition, it does not seem likely that they would be eager to experience any of these negative events anytime sooner. Conceivably, they may report that they will be less affected by distant negative events than near negative events because they feel the distant events are less likely to occur.

Lastly, we also included a measure of self-esteem in the present study to examine whether it might moderate the effects of negative moods on people's affective forecasts. There was a significant mood x self-esteem interaction. As expected, LSE individuals demonstrated mood congruent affective predictions, (i.e., they expected to feel more positively in the neutral than the negative mood condition). Although HSE individuals

did not generate the expected mood incongruent affective predictions (i.e., higher in the negative than the neutral mood condition), they did not exhibit this same pattern of mood congruency; their predictions did not differ across the negative and neutral mood conditions. Contrary to the hypothesis, within the negative mood condition, HSE individuals did not generate significantly more positive affective predictions than LSE individuals, although the means were in the predicted direction.

Although these findings were not entirely consistent with the hypotheses, they highlight similarities that may exist between HSE individuals and people that adopt a reflective focus on their moods as well as between LSE individuals and people who adopt a ruminative focus on their moods. Perhaps HSE individuals tend to have a greater capacity to engage in a reflective orientation on their negative moods than do LSE individuals who may be more prone to ruminate on their moods when experiencing distress.

An additional unanticipated interaction was obtained between self-esteem and mood focus, and this interaction provides partial support for our explanation of the previous finding involving the influence of self-esteem on people's affective forecasts. Amongst LSE individuals, those exposed to the reflective mood focus manipulation tended to generate more positive affective predictions than those exposed to the ruminative mood focus manipulation. This finding suggests that LSE individuals may not be naturally disposed to use various cognitive tools that have implications for mood repair (i.e., compared with HSE individuals), but when explicitly directed (i.e., asked to adopt a reflective orientation to their moods), they may take the opportunity to do so.

Interestingly, amongst HSE individuals, the opposite pattern occurred. Specifically, those participants who were exposed to the reflective mood focus condition tended to generate less positive affective predictions than those who were exposed to the

ruminative mood focus condition. This finding contradicts our previous explanation involving the similarities between HSE and a reflective mood focus, and suggests that it may not be wise to attempt to influence the way in which HSE individuals focus on their moods when they are experiencing distress.

General Discussion

The results of the current studies were generally consistent with our hypotheses that people's affective forecasts may at times be influenced by motivational forces. Specifically, both studies demonstrated that people's predictions of their future feelings were jointly influenced by both their current moods and the manner in which they were focussed on their feelings.

In Study 1, as hypothesised, reflectors exhibited mood incongruent affective predictions while ruminators exhibited mood congruent affective predictions. Specifically, reflectors generated more positive affective forecasts in the negative mood condition than in the neutral mood condition. Conversely, ruminators generated more positive affective predictions in the neutral mood condition than in the negative mood condition. Additionally, amongst participants in the negative mood condition, those who adopted a reflective focus on their moods made more positive affective predictions than those who adopted a ruminative focus. Amongst control participants (participants not exposed to either of the mood focus manipulations), those in the negative mood condition generated more positive affective predictions than those in the neutral mood condition, although this difference was not statistically significant.

Taken together, these findings suggest that people experiencing negative moods may have been motivated to repair their moods, however, whether they engaged in an attempt to repair their moods seems to have depended upon how they were focussed on their feelings. Although a common intuition may be that all individuals who are

experiencing negative feelings would be motivated to repair their moods, it appeared that

only those participants who had been led to adopt a reflective focus took efforts to do so.

Also consistent with this motivational explanation, were participants' ratings of

the positive mood items immediately following their opportunity to make affective

predictions to various positive events. Participants who had been exposed to the negative

mood condition and who had been led to adopt a reflective focus on their moods reported

feeling more positive than any other group of participants. Thus, the first study provided

fairly strong evidence that people sometimes make use of their affective predictions for

upcoming positive events as a possible mood-regulation strategy.

Study 2 partially replicated the findings from Study 1 as a significant interaction

indicated that participants' affective predictions were once again jointly influenced by

both their moods and how they were focussed on their moods. It also extended the initial

study to include an examination of people's affective predictions to various upcoming

negative events in addition to their predictions for upcoming positive events. As in Study

1, ruminators exhibited a pattern of mood congruency in their predictions whereby their

affective predictions in the neutral mood condition were marginally more positive than in

the negative mood condition. Reflectors did not exhibit the hypothesised pattern of mood

incongruency in their predictions, as they generated equally positive predictions in the

negative and neutral mood conditions. Notably, however, the reflectors did not exhibit

the mood congruent pattern displayed by the ruminators. In addition, amongst

participants in the negative mood condition, reflectors once again generated slightly more

positive affective predictions than ruminators, although this difference was not

significant.

It is interesting to note that, although the mood by mood focus interaction was not

moderated significantly by the valence of the events, it appeared to occur only for the

negative events. Participants who were led to adopt a reflective focus predicted they would be less adversely affected (i.e., they were more positive in their affective predictions) in the negative mood condition than the neutral mood condition. Once again, then, reflectors in the negative mood condition may have been both motivated and able to attempt to improve their current moods. This finding suggests that people can also make use of their predictions for upcoming negative events as yet another mood-repairing strategy. For positive events, the pattern of effects obtained in Study 1 was not replicated in Study 2. It is not clear why the hypothesised interaction effect was not obtained in Study 2. One difference between the studies was that in Study 2, instructions specified the time the target events would take place, whereas in Study 1 the exact timing of the events was not specified. Specifying a time line for the various positive events in Study 2 may have had the effect of decreasing the potential pleasantness of the events because participants may have been more concerned about the event's feasibility than they would have been otherwise. Further research is needed to examine the moderating role of event valence in motivated affective forecasting.

The temporal distance of the events for which participants generated their affective predictions was also varied in Study 2. The temporal distance manipulation revealed two findings. First, regardless of the particular way people focussed on their moods, people experiencing negative moods predicted that they would have more positive experiences during upcoming pleasant events if they occurred within the near rather than the distant future; whereas participants in the neutral mood condition generated the opposite pattern of predictions. This finding was not hypothesised and we can only speculate as to why it occurred. It may reflect a motivational drive inherent in people suffering distress to experience the upcoming positive event which they may view as an opportunistic chance to repair their current moods. The more immediately they can

experience this positive event, the more opportunity it provides for improving their current feelings.

Second, when generating predictions for future negative events, participants in the negative mood condition expected to experience more positive feelings (i.e., less negative feelings) when the same negative event was in the distant rather than the near future. Again, it is not evident why this pattern of effects was observed for negative events. Conceivably, this may reflect the extent to which participants expect the target events to occur. Events in the distant future may seem less likely, and thus it would be easier for participants to predict that they will be relatively unaffected. This explanation is speculative, and further research is needed to examine the effects of temporal distance on the ways in which people generate their affective predictions.

Study 2 also included a measure of self-esteem to examine whether it might moderate the effects of negative moods on people's affective forecasts. As expected, LSE individuals demonstrated a pattern of mood congruent affective predictions, (i.e., more positive in the neutral than the negative mood condition). On the other hand, HSE individuals did not generate the expected pattern of mood incongruent affective predictions (i.e., higher in the negative than the neutral mood condition). However, it is important to note that HSE individuals did not exhibit this same pattern of mood congruency as their predictions did not differ across the negative and neutral mood conditions.

These findings highlight the similarities that may exist between HSE individuals and having a reflective focus on one's mood as well as between LSE individuals and having a ruminative focus on one's mood. Perhaps HSE individuals tend to have a greater capacity to engage in a reflective orientation on their negative moods than do LSE

individuals who may be more prone to ruminate on their moods when experiencing distress.

These studies have contributed to the existing research on affective forecasting by giving attention to the motivational forces that may at times underlie the way in which people generate predictions concerning their future feelings. Until now researchers and theorists had focussed almost entirely on the cognitive processes underlying people's affective forecasts. The present studies have shown that people's current moods can increase or decrease the degree of positive reactions they expect to experience, depending upon how they are focussed on their feelings and the valence of the events being predicted for.

Although the present studies were not concerned directly with assessing the accuracy or bias in affective forecasts, the findings suggest another reason why people may overestimate the positive feelings they will experience in the future. That is, people's overly positive affective forecasts may often reflect motives to enhance or maintain their current feelings. Their motives may be particularly likely to contribute to bias when people are momentarily experiencing unpleasant feelings. Interestingly, people who reflect on their current negative feelings may be less accurate in their predictions for future positive events yet more accurate in their affective predictions for future negative events as they predict that these upcoming unpleasant events would not be so bad.

The issue of accuracy however, may not be of primary importance to individuals experiencing distress. Instead, motivational forces working towards alleviating their distress seems to underlie the way in which people in negative moods generate their affective predictions, at least for people armed with a reflective mood focus. Thus, it seems that they use their affective predictions as a mood-repairing strategy. This mood-repairing strategy seems to be manifested by overestimating the positivity of their

predictions to positive future events and underestimating the negativity of their predictions for negative future events.

It is of interest to consider how adaptive or functional this mood regulation strategy will be, particularly if it prompts unrealistically positive forecasts. On the one hand, there may seem to be long term problems associated with this strategy. People may decide to take actions based upon their overly positive forecasts when they may not have otherwise, or at least prolonged the decision to do so. Such decisions (e.g., buying a new Porsche, travelling the world, going skydiving) could potentially be very costly in various facets of life (e.g., financially, emotionally, physically). Additionally, people may become painfully aware that their experience of a particular positive event was not as pleasant as they had expected (or at least hoped) it would be. When weighed against their overly positive predictions, their actual experience may seem even less pleasant than it would have otherwise. On the other hand, there are potential benefits to generating overly positive affective predictions. Previous research has shown that people's expectations for upcoming events can sometimes have a self-fulfilling influence on the way in which the events are experienced (Klaaren, Hodges, & Wilson, 1994; Wilson & Klaaren, 1992; Wilson et al., 1989). In these cases, generating overly positive affective predictions to various future events may ensure that people experience these events more positively than they may have otherwise. The present studies provided some evidence, albeit tentative, for the short-term effectiveness of affective forecasts in enhancing mood. In Study 1, reflectors in the negative mood condition, who generated relatively positive predictions about various future positive events subsequently reported feeling more positive than ruminators exposed to the same mood condition.

In Study 2, however, there were no differences between participants in either condition in terms of this post-affective forecast mood measure. The failure to replicate

the pattern observed in Study 1 may have been due to the fact that participants were asked to generate affective predictions about various negative events as well as positive events. Perhaps, contemplating the experience of these negative events was enough to offset any gain in current mood that was evidenced by reflectors in the negative mood condition in Study 1, where participants were only required to generate predictions for future positive events.

It is also worth noting that, in both Study 1 and 2, participants exposed to the negative mood condition reported feeling more negative after completing the visualisation procedure than participants in the neutral mood condition. However, no differences in current mood were reported between participants in the negative and neutral mood condition after they had a chance to generate their affective predictions. Although the improvement in mood in the negative mood condition may simply reflect the passage of time, it is also consistent with the possibility that participants in the negative mood condition (regardless of their particular mood focus) may have experienced an increase in the positivity of their current mood as a result of having had the chance to imagine how pleasurable various mildly positive events in the future would be. This effect may have been stronger had the future "mildly" positive events which participants generated affective predictions for been "extremely" positive in nature. In order to assess the impact of generating affective forecasts on subsequent feelings, future studies could attempt to experimentally manipulate whether participants have an opportunity to generate affective forecasts following a negative mood induction.

As the above discussion implies, the present programme of research has implications for understanding how people could effectively cope with distress. The findings may have implications in therapeutic settings, in that encouraging people to

adopt a reflective focus on their feelings, rather than a ruminative focus, may accelerate mood repair.

One limitation of the current studies is that they did not include measures of actual affective reactions to the target events, and thus the accuracy of participants' affective predictions could not be assessed. Although previous research on affective forecasting has typically shown that people seem to err systematically in the manner in which they predict their future feelings, some research suggests that people's mood predictions may also influence their actual emotional experience of the event (Klaaren, Hodges, & Wilson, 1994; Wilson & Klaaren, 1992; Wilson et al., 1989). Therefore, how accurate participants' affective predictions would have been had we obtained a measure of their actual emotional reactions after experiencing the various positive and negative future events should be considered independent of the degree of positivity of their predictions.

Another limitation in the current studies was that we used the same type of mood induction technique for both studies. There is a possibility that people receiving another form of negative mood induction (e.g., negative feedback, sad movies) may have reacted differently than participants in the current studies who were instructed to recall and visualise a particular event from their past. Therefore, to increase the convergent validity of our findings, future studies may attempt to replicate the current research using alternative mood induction techniques.

As with most psychological research conducted at university settings, the findings must be considered cautiously in terms of their generalisability. It is important to note that in both studies, all participants were university students enrolled in introductory psychology courses at Wilfrid Laurier University. It is not certain that participants from

other settings (e.g., students from other universities, from different cultures, of different age groups, non-students) would have reacted in the same manner.

The concerns mentioned above can best be addressed by further empirical research. In addition to addressing the limitations of the present study, there are a number of interesting issues that merit further research attention. Indeed the present studies have probably raised more questions than they have answered. For example, is it necessary that people fully intend to follow through with the experience of a particular positive future event for which that they make affective predictions in order to realise any gain in their current moods? Or could it be that simply imagining how positive a particular pleasant event would be (regardless of how likely it is to occur) may be enough to enhance one's current mood. Additionally, it would be interesting to know how frequently people attempt to envision how pleasantly they would experience a particular positive event in the future as a means of alleviating distress. That is, of all the possible mood-repairing strategies that people could utilise (e.g., recall of positive memories, favourable social comparisons, illusions of superiority) where would the application of affective forecasting fit in? Studies of these issues would shed further light on the causes and consequences of people's affective predictions. More generally, research on the topic of affective forecasting has the potential to enhance our understanding of the complex interrelations between people's thoughts, motivations, and feelings over the course of time.

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Endnotes

[1] The measures assessing the likelihood of various life events, as well as the personality measures were not analysed as these were beyond the scope of the present thesis. However, many of the personality scales were conceptually relevant, and warrant analysis in the future. Indeed, the construct of self-esteem is of particular theoretical interest and is examined thoroughly in Study 2. It was not initially analysed in Study 1 because there was a relatively low number of participants in each of the experimental conditions. After observing the self-esteem effects in Study 2, however, we checked to see whether a similar pattern was obtained in Study 1. Predictions were submitted to a 2 (mood: negative, neutral) X 3 (mood focus: reflective, ruminative, control) X 2 (self-esteem: HSE, LSE) ANOVA. Unlike Study 2, however, there was not a significant mood by self-esteem interaction.

[2] One-hundred and seventy-one participants originally participated in Study 2. The data from 14 participants were omitted from the analyses because their affective predictions to either one of the positive or negative future event indices indicated that they may have misread the scale endpoints (i.e., extremely positive feelings, extremely negative feelings). That is, these participants appeared not to notice that the scale endpoints differed for the positive and negative items.

[3] As in Study 1, the measures assessing the likelihood of various life events, as well as the personality measures (with the exception of self-esteem) were not analysed as these were beyond the scope of the present thesis.

Table 1

Positivity of affective predictions as a function of mood and mood focus (Study 1).

| | | Mood | |
		Negative	Neutral
Reflectors	M	8.89	8.21
	SD	.86	.96
Ruminators	M	8.20	9.14
	SD	1.13	.58
Control	M	8.59	8.42
	SD	.87	1.02

Table 2

Ratings of mood following prediction as a function of mood, mood focus, and item valence (Study 1).

		Mood	
		Negative	Neutral

Positive Mood Items

Reflectors	M	4.83	4.65
	SD	1.00	1.13
Ruminators	M	4.11	4.69
	SD	1.34	.79
Control	M	4.66	4.16
	SD	1.18	1.00

Negative Mood Items

Reflectors	M	6.21	6.41
	SD	1.03	.76
Ruminators	M	6.20	6.15
	SD	.78	.98
Control	M	6.44	6.58
	SD	.74	.59

Table 3

Positivity of affective predictions as a function of mood, mood focus, temporal distance,

and event valence (Study 2).

			Mood	
			Negative	Neutral
Positive Events				
Near Future Events				
Reflective Focus		M	8.45	8.71
		SD	.78	.81
Ruminative Focus		M	8.41	8.60
		SD	.90	1.00
Distant Future Events				
Reflective Focus		M	8.34	8.82
		SD	.69	.91
Ruminative Focus		M	7.91	9.02
		SD	.58	.78
Negative Events				
Near Future Events				
Reflective Focus		M	2.95	2.57
		SD	.42	.91
Ruminative Focus		M	3.00	3.16
		SD	.71	.81
Distant Future Events				
Reflective Focus		M	3.44	2.77
		SD	.75	.70
Ruminative Focus		M	3.27	2.85
		SD	.79	.83

Table 4

Positivity of affective predictions as a function of mood and mood focus (Study 2).

		Mood	
		Negative	Neutral
Reflectors	M	5.80	5.72
	SD	.40	.42
Ruminators	M	5.65	5.91
	SD	.45	.55

Table 5

Positivity of affective predictions for positive events as a function of mood and mood focus (Study 2).

		Mood	
		Negative	Neutral
Reflective Focus	M	8.39	8.76
	SD	.73	.85
Ruminative Focus	M	8.16	8.80
	SD	.79	.91

Table 6

Positivity of affective predictions for negative events as a function of mood and mood focus (Study 2).

		Mood	
		Negative	Neutral
Reflective Focus	M	3.21	2.67
	SD	.66	.81
Ruminative Focus	M	3.13	3.01
	SD	.75	.82

Table 7

Positivity of affective predictions as a function of mood, temporal distance, and event valence (Study 2).

		Mood	
		Negative	Neutral
Positive Events			
Near Future Events	M	8.43	8.66
	SD	.84	.90
Distant Future Events	M	8.13	8.92
	SD	.66	.84
Negative Events			
Near Future Events	M	2.98	2.86
	SD	.58	.90
Distant Future Events	M	3.35	2.81
	SD	.76	.76

Table 8

Positivity of affective predictions as a function of self-esteem and mood (Study 2).

		Mood	
		Negative	Neutral
Self-esteem			
High Self-esteem	M	5.78	5.74
	SD	.39	.41
Low Self-esteem	M	5.63	5.91
	SD	.48	.56

Table 9

Ratings of mood following prediction as a function of mood, mood focus, and event valence (Study 2).

		Mood	
		Negative	Neutral
Positive Mood Items			
Reflectors	M	4.21	4.29
	SD	.98	.93
Ruminators	M	4.13	4.19
	SD	1.12	1.13
Negative Mood Items			
Reflectors	M	5.95	5.97
	SD	1.04	.87
Ruminators	M	6.10	5.97
	SD	.94	.94

Appendix A.
WILFRID LAURIER UNIVERSITY: INFORMED CONSENT STATEMENT
<u>PRINCIPLE INVESTIGATOR</u>: Vassili Spyropoulos <u>SUPERVISOR</u>: Dr. Roger Buehler
<u>PROJECT</u>: PERSONALITY, VISUAL IMAGERY, AND SELF-RELEVANT PREDICTIONS

INFORMATION
You are invited to participate in a research study. The purpose of this study is to examine relations between people's personality styles and (a) the levels of visual imagery they have when thinking about events, and (b) their thoughts about themselves in the future. Participation in the study involves filling out a questionnaire that assesses each of these factors. Specifically, the questionnaire will ask you: to recall and visualize a past event, to make predictions about yourself in the future, and, finally, to fill out several personality scales (which ask questions about various aspects of your personality such as how you typically feel about yourself, how you typically react to situations, and how you experience your moods or feelings). Although the research cannot be fully explained at this time, a complete explanation will be provided at the conclusion of your participation today. The questionnaire will take approximately 30-45 minutes to complete and you will receive 1.0 research credit for your participation.

RISKS
There are no foreseeable risks involved in participating in this study. Please note, however, that you will be asked to think about various events from the past and people may experience a range of feelings when thinking about such past events.

BENEFITS
You will have the opportunity to observe directly the methods that researchers use to study relations among people's personality styles and their thoughts and judgments about themselves, thus enhancing your understanding of psychological research methods. By participating you will also be contributing to the growing body of knowledge concerning people's self-related thoughts and feelings.

CONFIDENTIALITY
Your responses will be kept completely anonymous: there will be no identifying information on the questionnaires, and your signed consent forms will be collected separately from the questionnaires. The results of this study are expected to appear in the principle researcher's M.A. thesis, and may also be reported in conference presentations and journal articles. Note, however, that the responses of individual participants will not be identified in any reports of this research; only aggregated data (e.g., averages from many people) will be reported. The questionnaires will be stored in a locked room in the psychology department that can be accessed only by the research supervisor and authorized researchers (i.e., Vassili Spyropoulos, Elaine Restorick, Nicole Ethier), and will be destroyed seven years after the completion of this study, in accordance with American Psychological Association guidelines.

COMPENSATION
Participants will receive 1.0 research credits toward the PS100 requirement. Participants who begin the study but choose to withdraw prior to its completion or ask to have their questionnaire responses deleted will still receive their full 1.0 research participation credit. Of course, once your completed questionnaire has been turned in, it cannot be withdrawn because it is anonymous. An alternative way to earn the same amount of credit is to complete a critical review of a journal article (guidelines are available in the general office N2006).

CONTACT

It

PARTICIPATION
Your participation in this study is completely voluntary. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. You are also free to omit the answer to any question.

FEEDBACK
We will be posting the results of this study on the Research bulletin board in the hallway beside room N2005 in the Science Building at Wilfrid Laurier University. Look for these to appear by April 5, 2002.

CONSENT
I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's name _____ Date _____
Participant's signature_____

Appendix B.
Personality, Visual Imagery, and Self-Relevant Predictions Study

Researcher: Vassili Spyropoulos

Background Information

Age _____

Sex _____

Instructions

In this study, we are interested in how personality traits relate to the way in which people imagine different events (i.e., how vividly they imagine events that have happened to them). Different groups of participants will be asked to describe different types of events that vary in terms of their level of emotion and they will then rate their imagery of the event on certain dimensions.

In addition, a secondary focus of this study is to explore how personality traits relate to people's predictions regarding events in their lives. People who possess certain types of traits may have different expectations for the future than people who do not possess these traits.

In order to explore the relationship between personality traits and these other psychological dimensions, you will be asked to complete measures of the above qualities (i.e., visual imagery, personality traits, self-relevant predictions and judgments).

Please complete the items in the order that they are presented (for purposes of experimental control).

When you are done, please seal your questionnaire in the unmarked envelope, and place it in the box along with the other completed questionnaires.

Please note that your responses are entirely anonymous and that we greatly appreciate your honesty and thoughtfulness in answering these questions.

Appendix C.1.
Visual Imagery Task
Right now, think back over the prior two years and try to remember a particularly **negative and unpleasant event** that happened to you. We would like you to think about an event that made you **feel very negative feelings**. **Reflect upon and vividly imagine this event for a moment or two** and try to imagine how this event made you feel. Then, describe it briefly below.

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1. On the following scale, indicate how good/bad the event was:

extremely   1 2 3 4 5 6 7 8 9 extremely
positive   negative
event   event

2. How vivid was the visual imagery you had when thinking about or describing the event:

not at all vivid 1 2 3 4 5 6 7 8 9 completely vivid

3. Please circle the number on the following scale that best represents how imagining the event makes you feel (how it affects your current mood):

extremely positive 1 2 3 4 5 6 7 8 9 extremely negative
                              ↑
                           neutral
                           or mixed
                           emotions

Appendix C.2.
Visual Imagery Task
Right now, <u>think back over the prior 2 years and try to remember a</u> particularly **neutral/mundane event** that happened to you (e.g., a typical/uneventful morning, etc.). We would like you to think about an event that did not create strong positive or negative feelings. **Reflect upon and actively imagine this event for a moment or two** and try to imagine how this event made you feel. Then, describe it briefly below.

_____

_____

_____

_____

_____

_____

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_____

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_____

_____

_____

_____

_____

_____

1. On the following scale, indicate how good/bad the event was:

extremely   1 2 3 4 5 6 7 8 9 extremely
positive   negative
event   event

2. How vivid was the visual imagery you had when thinking about or describing the event:

not at all vivid 1 2 3 4 5 6 7 8 9 completely vivid

3. Please circle the number on the following scale that best represents how imagining the event makes you feel (how it affects your current mood):

extremely positive 1 2 3 4 5 6 7 8 9 extremely negative
                                ↑
                            neutral
                            or mixed
                            emotions

Appendix D.1.
Reactions to Imagery Task

The act of imagining events from our lives often produces emotional reactions or feelings. Take a moment now to reflect on the feelings you are having in response to the imagery exercise on the prior page. **Below, we are interested in what sorts of thoughts people have about their feelings**. Listed below are a variety of common thoughts that people have about their feelings after the imagery task. Please circle the 2 reactions/thoughts that best capture your own personal thoughts. Note that not all of these items will capture your exact thoughts about your mood -- just select the two that come closest.

1. My feelings can be controlled.

2. I find my feelings clear and easy to label.

3. I can't deny I am feeling something.

4. I find I can acknowledge any negativity I have.

5. I am willing to attend to my feelings.

6. I believe I can change and improve my feelings.

7. If I know what I feel I can alter my moods.

8. I don't feel like dwelling on my feelings.

9. I feel like I want to do something to make myself feel better.

10. I feel like distracting myself from these feelings.

11. I feel like doing something that I've enjoyed in the past.

12. I can think positively to eliminate any negativity I feel

Appendix D.2.
Reactions to Imagery Task

The act of imagining events from our lives often produces emotional reactions or feelings. Take a moment now to reflect on the feelings you are having in response to the imagery exercise on the prior page. **Below, we are interested in what sorts of thoughts people have about their feelings.** Listed below are a variety of common thoughts that people have about their feelings after the imagery task. Please circle the 2 reactions/thoughts that best capture your <u>own</u> personal thoughts. Note that not all of these items will capture your exact thoughts about your mood -- just select the two that come closest.

1. I find myself focused on my feelings (e.g., sadness, loneliness, tiredness).

2. I feel passive and fatigued.

3. I find myself wondering why I feel the way I do about myself.

4. I tend to dwell on my feelings after imagining experiences such as this.

5. My feelings are mixed and not easy to label.

6. It isn't easy to change or improve my mood.

7. I wonder why I always react to things in the same way.

8. I am aware of my feelings but I'm not sure what to do about them.

9. I find myself ruminating somewhat about my mood.

10. I want to be by myself and analyze my reactions more.

11. I feel focused on myself, like I'm observing myself.

12. I find myself thinking about what my reactions imply about the kind of person I am.

Appendix E.
PREDICTIONS OF FUTURE FEELINGS

In this section of the questionnaire, we are interested in your expectations regarding events that are likely to occur over the next week or so. We are interested in how attributes such as personality and gender relate to people's predictions about how various events will affect their emotions. **For each event, please predict how pleasurable you will find the event (i.e., rate the degree to which you think experiencing the event will create positive feelings or a pleasant mood reaction in you).**

1. Eating a nice meal

1	2	3	4	5	6	7	8	9	10	11

extremeley negative feelings

neutral feelings

extremely positive feelings

2. Seeing friends or family members that you care about

1	2	3	4	5	6	7	8	9	10	11

extremeley negative feelings

neutral feelings

extremely positive feelings

3. Engaging in your preferred exercise activities

1	2	3	4	5	6	7	8	9	10	11

extremeley negative feelings

neutral feelings

extremely positive feelings

4. Drinking alcoholic beverages (or other beverages you enjoy)

1	2	3	4	5	6	7	8	9	10	11

extremeley negative feelings

neutral feelings

extremely positive feelings

5. Watching your favourite T.V. programs

1	2	3	4	5	6	7	8	9	10	11

extremeley negative feelings

neutral feelings

extremely positive feelings

Appendix E. (cont.)

6. Going shopping for things you have been wanting to get

1	2	3	4	5	6	7	8	9	10	11

extremeley
negative
feelings

neutral
feelings

extremely
positive
feelings

7. Having a relaxing bath or shower

1	2	3	4	5	6	7	8	9	10	11

extremeley
negative
feelings

neutral
feelings

extremely
positive
feelings

8. Successfully completing a school assignment

1	2	3	4	5	6	7	8	9	10	11

extremeley
negative
feelings

neutral
feelings

extremely
positive
feelings

9. Successfully completing a project at home (e.g., getting the house cleaned up)

1	2	3	4	5	6	7	8	9	10	11

extremeley
negative
feelings

neutral
feelings

extremely
positive
feelings

10. Going to an anticipated entertainment or social event (e.g., a movie, concert, birthday party, date, etc.)

1	2	3	4	5	6	7	8	9	10	11

extremeley
negative
feelings

neutral
feelings

extremely
positive
feelings

11. Spending time listening to music

1	2	3	4	5	6	7	8	9	10	11

extremeley
negative
feelings

neutral
feelings

extremely
positive
feelings

Appendix F.

Now that you have completed the predictions of your future feelings, please indicate how making these predictions makes you feel right now on the following mood dimensions:

Happy	not at all 1	2	3	4	5	6	7 extremely
Satisfied	not at all 1	2	3	4	5	6	7 extremely
Pleased	not at all 1	2	3	4	5	6	7 extremely
Disappointed	not at all 1	2	3	4	5	6	7 extremely
Sad	not at all 1	2	3	4	5	6	7 extremely
Proud	not at all 1	2	3	4	5	6	7 extremely
Competent	not at all 1	2	3	4	5	6	7 extremely
Ashamed	not at all 1	2	3	4	5	6	7 extremely
Humiliated	not at all 1	2	3	4	5	6	7 extremely

Appendix G.1.
PREDICTIONS OF FUTURE LIFE EVENTS

In this section of the questionnaire, we would like you to consider positive and negative life events that could possibly happen to you in the future. Please indicate how likely it seems that each event will happen to you compared to the average university student.

First, on the scale labeled "self", circle a number to indicate how likely it seems that the event will happen to you. Then, on the scale labeled "average other", circle a number to indicate how likely it seems that the same event will happen to the average university student. Then, move on to the next event, and so on.

Positive Life Events

1.   You will do better than expected on an upcoming exam.

Self   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

Average Other   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

2.   You will soon receive an unexpected phone call from an old friend.

Self   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

Average Other   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

3.   You will have a pleasant time during Summer vacation.

Self   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

Average Other   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

4.   You will soon do something that you are extremely proud of.

Self   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

Average Other   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

5.   You will have a good relationship with a significant other within the next year.

Self   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

Average Other   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10 Extremely Likely

Appendix G.2

<u>Negative Life Events</u>

6. You will have something of value stolen this year.

<u>Self</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

<u>Average Other</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

7. You will do something you regret or are embarrassed about soon.

<u>Self</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

<u>Average Other</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

8. You will say something that seems uninformed or idiotic to the people around you soon.

<u>Self</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

<u>Average Other</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

9. You will have a serious conflict with your parents within the coming weeks.

<u>Self</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

<u>Average Other</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

10. Your friends and acquaintances will talk about you behind your back.

<u>Self</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

<u>Average Other</u>   Extremely Unlikely   0—1—2—3—4—5—6—7—8—9—10   Extremely Likely

Appendix H.
Personality Types Survey

The items in this section of the questionnaire assess various aspects of your personality. Instructions for each subsection are presented at the beginning of every section. Please <u>do not dwell</u> on these items -- your first impressions are of most interest to us.

Part A

Please indicate your level of agreement with the following statements:

1. I feel that I am a person of worth, at least on an equal basis with others.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

2. I feel that I have a number of good qualities.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

3. All in all, I am inclined to feel that I am a failure.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

4. I am able to do things as well as most other people.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

5. I feel I do not have much to be proud of .

1	2	3	4
strongly disagree	disagree	agree	strongly agree

6. I take a positive attitude toward myself.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

7. On the whole, I am satisfied with myself.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

Appendix H. (cont.)

8. I wish I could have more respect for myself.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

9. I certainly feel useless at times.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

10. At times, I think I am no good at all.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

Appendix I.

<u>Part B</u>

This part of the questionnaire consists of 12 groups of statements. After reading each group of statements carefully, circle the number (0,1,2 or 3) next to the statement in each group which best describes the way you have been feeling over the past month, including today.

1. 0 - I do not feel sad
    1 - I feel sad
    2 - I am sad all the time and I can't seem to snap out of it
    3 - I am so sad or unhappy that I can't stand it

2. 0 - I am not particularly discouraged about the future
    1 - I feel discouraged about the future
    2 - I feel I have nothing to look forward to
    3 - I feel that the future is hopeless and that things cannot improve

3. 0 - I do not feel like a failure
    1 - I feel I have failed more than the average person
    2 - As I look back on my life, all I can see is a lot of failure
    3 - I feel I am a complete failure as a person

4. 0 - I get as much satisfaction out of things as I used to
    1 - I don't enjoy things the way I used to
    2 - I don't get real satisfaction out of anything anymore
    3 - I am dissatisfied or bored with everything

5. 0 - I don't feel particularly guilty
    1 - I feel guilty a good part of the time
    2 - I feel quite guilty most of the time
    3 - I feel guilty all of the time

6. 0 - I don't feel disappointed in myself
    1 - I am disappointed in myself
    2 - I am disgusted with myself
    3 - I hate myself

7. 0 - I have not lost interest in other people
    1 - I am less interested in other people than I used to be
    2 - I have lost most of my interest in other people
    3 - I have lost all of my interest in other people

8. 0 - I make decisions about as well as I ever could
    1 - I put off making decisions more than I used to
    2 - I have greater difficulty in making decisions than before
    3 - I can't make decisions at all anymore

9. 0 - I don't feel I look any worse than I used to
    1 - I am worried that I am looking old or unattractive
    2 - I feel that there are permanent changes in my appearance that make me look unattractive
    3 - I believe that I look ugly

Appendix I. (cont.)

10.   0 - I can work about as well as before
         1 - It takes an extra effort to get started at doing something
         2 - I have to push myself very hard to do anything
         3 -I can't do any work at all

11.   0 - I don't get more tired than usual
         1 - I get tired more easily than I used to
         2 - I get tired from doing almost anything
         3 - I am too tired to do anything

12.   0 - My appetite is no worse than usual
         1 - My appetite is not as good as it used to be
         2 - My appetite is much worse now
         3 - I have no appetite at all anymore

Appendix J.
Part C

Reactions to Depression Inventory

People think and do many different things when they feel depressed. Please read each of the items below and indicate whether you never, sometimes, often or always think or do each one when you feel down, sad, or depressed. Please indicate what you *generally* do, not what you think you should do.

1. Think about how alone you feel.

1	2	3	4
almost never	sometimes	often	almost always

2. Think "I'm going to do something to make myself feel better".

1	2	3	4
almost never	sometimes	often	almost always

3. Think "I won't be able to do my job/work because I feel so badly".

1	2	3	4
almost never	sometimes	often	almost always

4. Help someone else with something in order to distract yourself.

1	2	3	4
almost never	sometimes	often	almost always

5. Analyze recent events to try to understand why you are depressed.

1	2	3	4
almost never	sometimes	often	almost always

6. Go to a favourite place to get your mind off your feelings.

1	2	3	4
almost never	sometimes	often	almost always

7. Go away by yourself and think about why you feel this way.

1	2	3	4
almost never	sometimes	often	almost always

8. Think "I'll concentrate on something other than how I feel".

1	2	3	4
almost never	sometimes	often	almost always

9. Think about all your shortcomings, failings, faults, mistakes.

1	2	3	4
almost never	sometimes	often	almost always

Appendix J. (cont.)

10. Concentrate on your work.

1	2	3	4
almost never	sometimes	often	almost always

11. Think about how you don't feel up to doing anything.

1	2	3	4
almost never	sometimes	often	almost always

12. Do something you enjoy.

1	2	3	4
almost never	sometimes	often	almost always

Appendix K.
Part D

The following items are designed to give a detailed assessment of how you <u>generally</u> feel about your moods and emotional states. Note that although some of the items may seem quite similar, there are subtle differences between them that are important to this researcher (i.e., the researcher wants to compare items from several previously established measurement scales). Please indicate your agreement with each statement.

1. Often my feelings are out of control.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

2. I can't change my mood even when I try.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

3. I often try to prevent my temporary moods from affecting how I see myself.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

4. Most of the time I believe there is nothing wrong with feeling the way I do.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

5. I am usually not at all ashamed of how I feel.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

6. My emotional reactions are a central and important part of who I am.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

7. It is generally bad to suppress or ignore one's feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

8. My emotional experiences are rich and varied and add to my life.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

Appendix K. (cont.)

9. It is generally important to be open about your feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

10. Well functioning adults are people who are fully attentive to their feelings and motives.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

11. I try to think good thoughts no matter how badly I feel.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

12. I don't usually care much about what I'm feeling.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

13. I am rarely confused about how I feel.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

14. Although I am sometimes sad, I have a mostly optimistic outlook.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

15. When I become upset I remind myself of all the pleasures in life.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

16. One should never be guided by emotions.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

17. I believe in acting from the heart.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

Appendix K. (cont.)

18. I can't make sense out of my feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

19. I don't pay much attention to my feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

20. I am usually very clear about my feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

21. No matter how badly I feel, I try to think about pleasant things.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

22. I can never tell how I feel.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

23. It is usually a waste of time to think about your emotions.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

24. I almost always know exactly how I am feeling.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

25. I often try to do things to change my negative moods.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

26. I have a hard time labeling my feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

Appendix K. (cont.)

27. I find myself thinking about my mood during the day.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

28. I am sensitive to changes in my mood.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

29. On my way home from work or school, I find myself evaluating my mood.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

30. Right now I know what kind of mood I am in.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

31. I often evaluate my mood.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

32. I have trouble explaining my feelings.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

33. I am usually tuned in to my emotions.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

Appendix L.

<u>Part E</u>

1. I always seem to be "re-hashing" in my mind recent things I've said or done.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

2. Long after an argument or disagreement is over with, my thoughts keep going back to what happened.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

3. I tend to "ruminate" or dwell over things that happen to me for a really long time afterward.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

4. I don't waste time re-thinking things that are over and done with.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

5. Often, I'm playing back over in my mind how I acted in a past situation.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

6. I often find myself re-evaluating something I've done.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

7. I love exploring my "inner" self.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

8. My attitudes and feelings about things fascinate me.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

Appendix L. (cont.)

9. I don't really care for introspective or self-reflective thinking.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

10. I love analyzing why I do things.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

11. I love to meditate on the nature and meaning of things.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

12. I often love to look at my life in philosophical ways.

1	2	3	4	5
strongly disagree	somewhat disagree	neither agree nor disagree	somewhat agree	strongly agree

Appendix M.

1. Eating a nice meal

2. Seeing friends or family that you care about

3. Drinking alcoholic beverages (or other beverages you enjoy)

4. Watching your favourite T.V. programs

5. Going shopping for things you have been wanting to get

6. Going to an anticipated entertainment or social event (e.g., a movie, concert, birthday

party, date, etc.)

7. Spending time listening to music

Appendix N.
WILFRID LAURIER UNIVERSITY: INFORMED CONSENT STATEMENT
PRINCIPLE INVESTIGATOR: Vassili Spyropoulos SUPERVISOR: Dr. Roger Buehler
PROJECT: PERSONALITY, VISUAL IMAGERY, AND SELF-RELEVANT PREDICTIONS

INFORMATION
You are invited to participate in a research study. The purpose of this study is to examine relations between people's personality styles and (a) the levels of visual imagery they have when thinking about events, and (b) their thoughts about themselves in the future. Participation in the study involves filling out a questionnaire that assesses each of these factors. Specifically, the questionnaire will ask you: to recall and visualize a past event, to make predictions about yourself in the future, and, finally, to fill out several personality scales (which ask questions about various aspects of your personality such as how you typically feel about yourself, how you typically react to situations, and how you experience your moods or feelings). Although the research cannot be fully explained at this time, a complete explanation will be provided at the conclusion of your participation today. The questionnaire will take approximately 30-45 minutes to complete and you will receive 1.0 research credit for your participation.

RISKS
There are no foreseeable risks involved in participating in this study. Please note, however, that you will be asked to think about various events from the past and people may experience a range of feelings when thinking about such past events.

BENEFITS
You will have the opportunity to observe directly the methods that researchers use to study relations among people's personality styles and their thoughts and judgments about themselves, thus enhancing your understanding of psychological research methods. By participating you will also be contributing to the growing body of knowledge concerning people's self-related thoughts and feelings.

CONFIDENTIALITY
Your responses will be kept completely anonymous: there will be no identifying information on the questionnaires, and your signed consent forms will be collected separately from the questionnaires. The results of this study are expected to appear in the principle researcher's M.A. thesis, and may also be reported in conference presentations and journal articles. Note, however, that the responses of individual participants will not be identified in any reports of this research; only aggregated data (e.g., averages from many people) will be reported. The questionnaires will be stored in a locked room in the psychology department that can be accessed only by the research supervisor and authorized researchers (i.e., Vassili Spyropoulos, Elaine Restorick, Nicole Ethier), and will be destroyed seven years after the completion of this study, in accordance with American Psychological Association guidelines.

COMPENSATION
Participants will receive 1.0 research credits toward the PS100 requirement. Participants who begin the study but choose to withdraw prior to its completion or ask to have their questionnaire responses deleted will still receive their full 1.0 research participation credit. Of course, once your completed questionnaire has been turned in, it cannot be withdrawn because it is anonymous. An alternative way to earn the same amount of credit is to complete a critical review of a journal article (guidelines are available in the general office N2006).

CONTACT

PARTICIPATION
Your participation in this study is completely voluntary. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. You are also free to omit the answer to any question.

FEEDBACK
We will be posting the results of this study on the Research bulletin board in the hallway beside room N2005 in the Science Building at Wilfrid Laurier University. Look for these to appear by April 5, 2003.

CONSENT
I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's name _____ Date _____
Participant's signature_____

Appendix O.
Personality, Visual Imagery, and Self-Relevant Predictions Study

<u>Researcher</u>: Vassili Spyropoulos

<u>Background Information</u>

Age _____

Sex _____

<u>Instructions</u>

In this study, we are interested in how personality traits relate to the way in which people imagine different events (i.e., how vividly they imagine events that have happened to them). Different groups of participants will be asked to describe different types of events that vary in terms of their level of emotion and they will then rate their imagery of the event on certain dimensions.

In addition, a secondary focus of this study is to explore how personality traits relate to people's predictions regarding events in their lives. People who possess certain types of traits may have different expectations for the future than people who do not possess these traits.

In order to explore the relationship between personality traits and these other psychological dimensions, you will be asked to complete measures of the above qualities (i.e., visual imagery, personality traits, self-relevant predictions and judgments).

Please complete the items in the order that they are presented (for purposes of experimental control).

When you are done, please seal your questionnaire in the unmarked envelope, and place it in the box along with the other completed questionnaires.

Please note that your responses are entirely anonymous and that we greatly appreciate your honesty and thoughtfulness in answering these questions.

Appendix P.1.
Visual Imagery Task
Right now, think back over the prior two years and try to remember a particularly **negative and unpleasant event** that happened to you. We would like you to think about an event that made you **feel very negative feelings**. **Reflect upon and vividly imagine this event for a moment or two** and try to imagine how this event made you feel. Then, describe it briefly below.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

1. On the following scale, indicate how good/bad the event was:

extremely   1   2   3   4   5   6   7   8   9   extremely
positive   negative
event   event

2. How vivid was the visual imagery you had when thinking about or describing the event:

not at all vivid   1 2 3 4 5 6 7 8 9   completely vivid

3. Please circle the number on the following scale that best represents how imagining the event makes you feel (how it affects your current mood):

extremely positive   1   2   3   4   5   6   7   8   9   extremely negative
                                     ↑
                                  neutral
                                  or mixed
                                  emotions

Appendix P.2.
Visual Imagery Task
Right now, <u>think back over the prior 2 years and try to remember a</u> particularly **neutral/mundane event** that happened to you (e.g., a typical/uneventful morning, etc.). We would like you to think about an event that did not create strong positive or negative feelings. **Reflect upon and actively imagine this event for a moment or two** and try to imagine how this event made you feel. Then, describe it briefly below.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

1. On the following scale, indicate how good/bad the event was:

extremely   1   2   3   4   5   6   7   8   9   extremely
positive   negative
event   event

2. How vivid was the visual imagery you had when thinking about or describing the event:

not at all vivid   1 2 3 4 5 6 7 8 9 completely vivid

3. Please circle the number on the following scale that best represents how imagining the event makes you feel (how it affects your current mood):

extremely positive   1   2   3   4   5   6   7   8   9   extremely negative
                                     ↑
                                  neutral
                                  or mixed
                                  emotions

Appendix Q.1.
Reactions to Imagery Task

The act of imagining events from our lives often produces emotional reactions or feelings. Take a moment now to reflect on the feelings you are having in response to the imagery exercise on the prior page. **Below, we are interested in what sorts of thoughts people have about their feelings**. Listed below are a variety of common thoughts that people have about their feelings after the imagery task. Please circle the 2 reactions/thoughts that best capture your <u>own</u> personal thoughts. Note that not all of these items will capture your exact thoughts about your mood -- just select the two that come closest.

1. My feelings can be controlled.

2. I find my feelings clear and easy to label.

3. I can't deny I am feeling something.

4. I find I can acknowledge any negativity I have.

5. I am willing to attend to my feelings.

6. I believe I can change and improve my feelings.

7. If I know what I feel I can alter my moods.

8. I don't feel like dwelling on my feelings.

9. I feel like I want to do something to make myself feel better.

10. I feel like distracting myself from these feelings.

11. I feel like doing something that I've enjoyed in the past.

12. I can think positively to eliminate any negativity I feel

Appendix Q.2.
Reactions to Imagery Task

The act of imagining events from our lives often produces emotional reactions or feelings. Take a moment now to reflect on the feelings you are having in response to the imagery exercise on the prior page. **Below, we are interested in what sorts of thoughts people have about their feelings.** Listed below are a variety of common thoughts that people have about their feelings after the imagery task. Please circle the 2 reactions/thoughts that best capture your <u>own</u> personal thoughts. Note that not all of these items will capture your exact thoughts about your mood -- just select the two that come closest.

1. I find myself focused on my feelings (e.g., sadness, loneliness, tiredness).

2. I feel passive and fatigued.

3. I find myself wondering why I feel the way I do about myself.

4. I tend to dwell on my feelings after imagining experiences such as this.

5. My feelings are mixed and not easy to label.

6. It isn't easy to change or improve my mood.

7. I wonder why I always react to things in the same way.

8. I am aware of my feelings but I'm not sure what to do about them.

9. I find myself ruminating somewhat about my mood.

10. I want to be by myself and analyze my reactions more.

11. I feel focused on myself, like I'm observing myself.

12. I find myself thinking about what my reactions imply about the kind of person I am.

Appendix R.1.
PREDICTIONS OF FUTURE FEELINGS

In this section of the questionnaire, we are interested in your expectations regarding events that are likely to occur over the next couple of days (e.g., tonight, tomorrow). We are interested in how attributes such as personality and gender relate to people's predictions about how various events will affect their emotions. **For each event, please predict how pleasurable you will find the event (i.e., rate the degree to which you think experiencing the event will create positive feelings or a pleasant mood reaction in you).**

1. Eating a nice meal

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

2. Seeing friends or family that you care about

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

3. Drinking alcoholic beverages (or other beverages you enjoy)

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

4. Watching your favourite T.V. programs

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

5. Going shopping for things you have been wanting to get

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

6. Going to an anticipated entertainment or social event (e.g., a movie, concert, birthday party, date, etc.)

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

7. Spending time listening to music

extremely	1	2	3	4	5	6	7	8	9	10	11 extremely
negative						neutral					positive
feelings						feelings					feelings

Appendix R.2.
PREDICTIONS OF FUTURE FEELINGS

In this section of the questionnaire, we are interested in your expectations regarding events that are likely to occur in one month from now (e.g., approx. 30 days). We are interested in how attributes such as personality and gender relate to people's predictions about how various events will affect their emotions. **For each event, please predict how pleasurable you will find the event (i.e., rate the degree to which you think experiencing the event will create positive feelings or a pleasant mood reaction in you).**

1. Eating a nice meal

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

2. Seeing friends or family that you care about

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

3. Drinking alcoholic beverages (or other beverages you enjoy)

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

4. Watching your favourite T.V. programs

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

5. Going shopping for things you have been wanting to get

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

6. Going to an anticipated entertainment or social event (e.g., a movie, concert, birthday party, date, etc.)

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

7. Spending time listening to music

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
negative   neutral   positive
feelings   feelings   feelings

Appendix S.1.
PREDICTIONS OF FUTURE FEELINGS
In this section of the questionnaire, we are interested in your expectations regarding events that are likely to occur over the next couple of days (e.g., tonight, tomorrow). We are interested in how attributes such as personality and gender relate to people's predictions about how various events will affect their emotions. **For each event, please predict how negative you will find the event (i.e., rate the degree to which you think experiencing the event will create negative feelings or an unpleasant mood reaction in you).**

1. Experiencing the loss of a family pet

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

2. Discovering that your current relationship partner no longer wants to see you anymore

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

3. Having to clean your entire house/apartment

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

4. Spending the entire holiday season alone

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

5. Failing your next Introductory to Psychology exam

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

6. Not getting invited to an anticipated entertainment or social event in which the rest of friends will be attending (e.g., a movie, concert, birthday party, wedding, etc.)

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

7. Receiving news that you have been fired from your job

extremely   1   2   3   4   5   6   7   8   9   10   11 extremely
positive   neutral   negative
feelings   feelings   feelings

Appendix S.2.

PREDICTIONS OF FUTURE FEELINGS

In this section of the questionnaire, we are interested in your expectations regarding events that are likely to occur in a month from now (e.g., in approx. 30 days). We are interested in how attributes such as personality and gender relate to people's predictions about how various events will affect their emotions. **For each event, please predict how negative you will find the event (i.e., rate the degree to which you think experiencing the event will create negative feelings or an unpleasant mood reaction in you).**

1. Experiencing the loss of a family pet

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

2. Discovering that your current relationship partner no longer wants to see you anymore

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

3. Having to clean your entire house/apartment

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

4. Spending the entire holiday season alone

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

5. Failing your next Introductory to Psychology exam

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

6. Not getting invited to an anticipated entertainment or social event in which the rest of friends will be attending (e.g., a movie, concert, birthday party, wedding, etc.)

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

7. Receiving news that you have been fired from your job

extremely	1	2	3	4	5	6	7	8	9	10	11	extremely
positive						neutral						negative
feelings						feelings						feelings

Appendix T.

Now that you have completed the predictions of your future feelings, please indicate how making these predictions makes you feel right now on the following mood dimensions:

Happy	not at all 1	2	3	4	5	6	7 extremely
Satisfied	not at all 1	2	3	4	5	6	7 extremely
Pleased	not at all 1	2	3	4	5	6	7 extremely
Disappointed	not at all 1	2	3	4	5	6	7 extremely
Sad	not at all 1	2	3	4	5	6	7 extremely
Proud	not at all 1	2	3	4	5	6	7 extremely
Competent	not at all 1	2	3	4	5	6	7 extremely
Ashamed	not at all 1	2	3	4	5	6	7 extremely
Humiliated	not at all 1	2	3	4	5	6	7 extremely