# Two personality traits negative and positive psychology essay



Two personality traits, negative and positive urgency, reflect individual differences in the disposition to engage in rash action when experiencing extreme negative and positive mood. However, research into the effect of positive, neutral and negative mood on rash behaviour is limited. Forty-one participants engaged in a within-subjects design, whereby three mood states (positive, neutral, negative) were manipulated through film clips shown in a counterbalanced order. Participants rated their mood and conducted a Balloon Analogue Risk Task (BART) after each film excerpt. The UPPS-P impulsivity scale measured three personality traits: negative urgency, sensation seeking (a control) and positive urgency. Positive mood increased risk-taking compared to negative, but not to neutral mood. The degree of rash behaviour was independent of mood shift and the three personality traits. Limitations of the sample, a weakness in the mood induction and several limitations on the BART might account for why urgency did not predict rash behaviour. Applications to theory and future implications are discussed.

# Introduction

"Emotions are fundamentally adaptive" (Billieux, Gay, Rochat, & Van der Linden, 2010, p. 1085). They motivate an individual's response to the environment; contrary to this concept, however, emotions do not always result in adaptive behaviours (Billieux et al., 2010). As a result of these emotion-based dispositions to perform rash actions, two personality traits have been proposed; negative urgency and positive urgency (Cyders & Smith, 2007). These traits reflect "individual differences in the disposition to engage in rash action when experiencing an extreme negative or positive

mood" (Cyders & Smith, 2008b, p. 807). Previous research has tied negative mood states with a greater frequency of dysfunctional, addictive behaviours (Claes, Vandereycken, & Vertommen, 2005), and positive mood with risktaking behaviours (Cyders et al., 2010).

As negative and positive urgency are involved in predicting problem levels of involvement in a range of maladaptive behaviours (Cyders & Smith, 2008b), their ability to predict rash behaviour on a gambling task was explored. Specifically, the role of negative and positive urgency in predicting performance on a risk-taking gambling task after a positive, neutral and negative mood induction was investigated. It is well illustrated that individuals in heightened negative or positive mood states might be more inclined to engage in rash actions (Cyders & Smith, 2008b). Yet preceding research has failed to explore the impact of all three mood states on a risktaking gambling task, whilst also investigating individuals self-reported urgency traits. Through doing so, the impact of positive, neutral, and negative moods on risk-taking were investigated separately, and also compared to each other. Therefore, the impact of each mood state on rash behaviour, which mood state led to greater risk-taking and whether selfreported negative or positive urgency predicted such rash behaviour were all assessed. This may have implications for clinicians working with depressed or pathological gamblers (Yuen & Lee, 2003).

Research investigating urgency originated from the recognition that impulsivity reflected a "combination of multiple, separate psychological constructs" (Billieux et al., 2010, p. 1086). In order to understand the facets underlying impulsivity, Whiteside and Lynam (2001), used a broad model of https://assignbuster.com/two-personality-traits-negative-and-positive-psychology-essay/

personality, The Five-Factor Model (FFM). The FFM includes five personality traits: Neuroticism; Extraversion; Agreeableness; Conscientiousness; and Openness to Experience (see Whiteside and Lynam, 2001). Their empirical approach was to conduct a factor solution by assembling a variety of impulsivity measures to establish "the common underlying dimensions" (Cyders & Smith, 2008b, p. 808). Whiteside and Lynam's (2001), factor analysis produced four factors: Sensation Seeking; Lack of Planning; Lack of Perseverance; and Negative Urgency. Each factor is parallel to one facet of the FFM (Cyders & Smith, 2008). Lack of Planning is equivalent to the deliberation facet of Conscientiousness, whilst Lack of Perseverance is parallel to the self-discipline facet; Sensation Seeking corresponds to the excitement-seeking aspect of Extraversion, and Urgency was found to be analogous to the impulsive component of Neuroticism (Cyders & Smith, 2008b).

In 2007, evidence for a fifth disposition to engage in rash action was proposed; Positive Urgency (Cyders et al., 2007). The authors based their proposal upon the extensive evidence for the existence of positive urgency in a variety of problematic behaviours, such as alcohol consumption and gambling (Del Boca, Darkes, Greenbaum, & Goldman, 2004; Holub, Hodgins, & Peden, 2005). However, positive urgency was not represented in the original impulsivity factor analysis by Whiteside and Lynam (2001). Accordingly, Cyders et al. (2007), conducted a factor analysis including positive urgency, which found a high correlation with negative urgency, and modest correlations with Sensation Seeking, Lack of Planning and Lack of Perseverance. Urgency is, consequently, deemed a broad factor which

reflects negative and positive facets (Cyders et al., 2007), which are explored in the current study.

Intense moods can prompt problematic behaviours, which interfere with rational decision-making (Dolan, 2007), and impair the ability to regulate risky behaviour (Muraven & Baumeister, 2000). With regard to risk-taking, the Affect Infusion Model (AIM), postulates that extreme moods cause a bias in cognitive processing; hence risky decisions are perceived more favourable in positive moods, but more threatening in negative moods (see Forgas, 1995). Therefore, positive moods heighten individuals' likeliness to engage in risk-taking, whereas, negative moods reduce the tendency to take risks (Chou, Lee, & Ho, 2007). In general, previous literature supports the AIM and is, typically, preferred over other models of decision-making which propose opposite outcomes to the AIM, such as the Mood Maintenance Hypothesis (Isen & Patrick, 1983).

The majority of predictions made from studies of this topic, fail to consider the impacts positive and negative moods have on judgements (Chou et al., 2007). Therefore, it is unclear whether the effects of negative and positive mood are symmetrical for rash behaviour. Similarly, the role of a neutral mood relative to positive and negative has been largely overlooked with evidence investigating the role of positive or negative urgency (Pearson, Murphy, & Doane, 2013), or comparing one facet to neutral mood (Mano, 1992). Consequently, the impact all three mood states have on a simulated risk-taking task are unobserved. To overcome this, participants' risk-taking behaviour was measured after a mood manipulation of positive, neutral and negative film clips. A within-subjects design was used to control for individual https://assignbuster.com/two-personality-traits-negative-and-positive-psychology-essay/

differences between participants. Film excerpts were used due to consistent findings that they are the most reliable and effective method of inducing mood over other mood-eliciting techniques (Schaefer, Nils, Sanchez, & Philippot, 2010). After each mood induction, risk-taking was measured on a computer simulated gambling task.

The assessment of risk-taking has predominately relied upon the use of subjective instruments which suffer from limitations of self-report (Eysenck, Pearson, Easting, & Allsopp, 1985). The alternative behavioural measures have consistently demonstrated poor convergent validity with self-reported measures of risk-taking (Petry, 2001). Crucially, all measures fail to capture risk-taking's multidimensional nature, causing previous risk-taking research to be questioned (Lejuez et al., 2002). To avoid such biases, a computerised, laboratory based task was used; The Balloon Analogue Risk Task (BART). This measure involves actual risky behaviour similar to real-world situations, whereby, potential for reward is balanced against potential for loss (Lejuez, Aklin, Zvolensky, & Pedulla, 2003). The BART significantly correlates with scores on self-reported measures of risk and occurrence of real-world risk behaviours (Lejuez et al., 2002), and was, therefore, used to measure individuals' risk-taking tendencies after each mood manipulation. Finally, only self-reported negative and positive urgency were measured as they are significant predictors of negative outcomes arising from rash behaviour (Billieux et al., 2010). However, this is not found in Lack of Planning, Lack of Perseverance and Sensation Seeking owing to poor predictive power (Cyders & Smith, 2008b). To rule out the possibility that the experience of risk-taking

was not from thrilling stimulation, but from intense mood states, sensation seeking was measured.

In accordance with the AIM, it was postulated that risk-taking tendencies would be significantly greater for participants when in the positive mood condition compared to the negative condition. Additionally, Chou et al. (2007), found risk-taking for a young sample (18-25 years) resulted in significant differences between neutral and negative moods, but not between neutral and positive moods. As the current sample fell into this age range, it was hypothesised that there would be significant differences for risk-taking between the neutral and negative mood states, but not between neutral and positive. Due to significant correlations between the BART and self-reported risk, it was expected that performance on the BART would predict self-reported impulsivity. Specifically, individuals who report high levels of negative and positive urgency would engage in more risky behaviours on the BART when under the negative and positive mood conditions.

# Method

# Participants.

A power analysis using G\*Power3 software was conducted (see Faul, Erdfelder, Lang, & Buchner, 2007), prior to the experiment for the effect of mood induction on risk-taking. Based on Cohen (1992), a medium effect size (Cohen's F = 0. 25), a correlation among the repeated-measures of 0. 5 and alpha being 0. 05 was assumed. A sample size of 40 was shown to have 90% power to detect a 'medium sized' effect of mood on risk-taking. Hence,

forty-one participants (39 female and 2 males) with an age range from 18-25 years, Mage = 19. 41, median = 19. 00, SD = 1. 41 were recruited from Cardiff University's participant panel in the School of Psychology in return for three course credits. All participants were exposed to the same experimental manipulations.

## Materials.

Mood Induction.

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A pilot study was conducted to identify three film clips which were efficient at eliciting positive (happy), neutral and negative (sad) mood. Six film clips (two from each mood induction) were chosen from two databases which investigated the reliability of a set of emotional film excerpts to elicit mood (Bartolini, 2011; Schaefer et al., 2010). Five (non-psychology) students from Cardiff University completed a Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988 [see Appendix A]) after each film clip. The film clip with the highest average PANAS score was selected for the relevant mood condition. 'For the Birds' was the positive film excerpt at 2 minutes 28 seconds in duration. Despite high overlap between calm and joy, the clip was used as it scored the highest ratings on the dimensions 'amusement' and 'happiness' for positive films (see Bartolini, 2011). The neutral film clip, 'Pride and Prejudice' (Opening Scene), lasted 1 minute 48 seconds and was found to elicit intense and discrete levels of calm, scoring the highest on the neutral dimension (Bartolini, 2011). The negative film clip, 'Dead Man Walking' (Execution Scene), was 6 minutes 17 seconds in length. This clip has been empirically proven to be effective at eliciting 'sad' mood in individuals and was ranked fifth in the top ten films in the database to induce https://assignbuster.com/two-personality-traits-negative-and-positivenegative mood (Schaefer et al., 2010). Finally, 'Wall-E' (Space Dance Scene), was shown to participants who viewed the negative film last, to increase mood. This clip only had a 1. 2 difference score in comparison to 'For the Birds' in the pilot study, and is effective in eliciting happiness, joy and amusement with a duration of 3 minutes 38 seconds (Bartolini, 2011). All film clips were shown on a computer via the video-sharing website, 'youtube' (see Appendix B).

#### Measuring Emotion.

From the pilot study, it was reported that adjectives on the PANAS such as 'strong' and 'proud' were not a true reflection of how participants felt during the films. Therefore, a 'Visual Analogue Mood Scale-Revised' (VAMS-R) was used (Kontou, Thomas, & Lincoln, 2012). The VAMS-R has high internal consistency in adults ( $\hat{l}\pm=0.74$ ) and is comprised by a three factor structure. Each factor has a 100mm line anchored by a neutral cartoon face and the verbal descriptor at one endpoint, and the cartoon face and adjective 'sad', 'happy' or 'energetic' at the other. Participants were required to indicate on each of the three 100mm lines their current level of mood after each mood induction. Positive moods were placed at the top of the line and negative at the bottom to improve the internal consistency from the original VAMS (Kontou et al., 2012).

Risk-Taking.

The BART is a computerised measure of real-world risk-taking behaviour (Lejuez et al., 2002), which has good test-retest reliability (r = .77; White, Lejuez, & Wit, 2008). A small simulated balloon is shown on a computer https://assignbuster.com/two-personality-traits-negative-and-positive-psychology-essay/

screen accompanied by a balloon pump, a reset button labelled 'Collect \$\$\$', a permanent money-earned display - 'Total Earned', and a second display -'Last Balloon', listing the money gained on the previous task (see Figure 1). Each click on the pump inflated the balloon about 0. 3cm and earned the participant five cents in a temporary reserve. However, all balloons had a different explosion point. Thus, every pump conferred greater potential for earning more money, but also greater risk of the balloon exploding and losing all the money. Participants were informed about the potential loss when a balloon was pumped over its individual explosion point, but they were unaware of the exact breakpoints. Participants could terminate the current trial at any point by clicking 'Collect \$\$\$'. Through doing so, all money gained on that trial was transferred to the 'Total Earned' display as a slot machine payoff sound effect played (see Lejuez et al., 2002). After each balloon explosion or money collection, exposure to that balloon ended, and a new balloon appeared until a total of twenty balloons for each mood induction were completed.

The adjusted average number of pumps for unexploded balloons is the most common task performance measure on the BART (Lejuez et al., 2002), and was a dependent variable in the current study. This variable measures the amount of balloons not exploded on each trial, and has the advantage of not being constrained by the explosion point of the balloon, with a higher score indicating a greater risk-taking propensity (Lejuez et al., 2003). The amount earned was another dependent variable which confirmed risk-taking after each mood induction, with a higher amount gained indicating greater risk-taking.

Figure 1. A visual diagram of the Balloon Analogue Risk Task as modified from Lejuez et al. (2002).

Personality characteristics.

The UPPS-P (Cyders et al., 2007), is a revised version of the UPPS impulsive behaviour scale (Whiteside & Lynam, 2001). It assessed the four pathways to impulsive behaviour from the original UPPS and the additional pathway, positive urgency. The 59 item scale measured Lack of Planning, Lack of Perseverance, Negative Urgency, Positive Urgency, and Sensation Seeking. Items are assessed on a Likert scale from 1 (agree strongly) to 4 (disagree strongly). The five scales from the UPPS-P have good convergent validity across assessment methods and good discriminant validity (Cyders et al., 2007). Whilst participants answered all 59 questions, only the three subscales, negative urgency ('When I am upset I often act without thinking'), sensation seeking ('I generally seek new and exciting experiences and sensations'), and positive urgency ('I tend to lose control when I am in a great mood') were scored. The negative urgency, sensation seeking and positive urgency subscales measured from the UPPS-P all had high reliabilities, Cronbach's  $\hat{i}\pm=.84$ ,  $\hat{i}\pm=.81$  and  $\hat{i}\pm=.91$ , respectively.

# Design.

All participants were exposed to the three independent variables, the positive, neutral and negative mood inductions in a within-subjects design. At baseline (participants' initial mood), and after each mood induction, participants rated the extent to which they were sad, happy and energetic, resulting in twelve mood scores. The dependent variables were the adjusted

average number of pumps for unexploded balloons and the amount earned on each trial as measured on the BART. Thus, for each dependent variable, every participant had a score from the BART after the three mood conditions; BART-positive, BART-neutral and BART-negative. Finally, the predictor variables were the three personality characteristics; negative urgency, sensation seeking and positive urgency, which measured participants' self-reported impulsivity.

## Procedure.

Once participants had given their consent, they were asked to sit on their own in silence, and with no stimulus present for five minutes to achieve a baseline neutral mood. To be as impartial as possible the experimental room only contained a computer (blank screen), a desk and a chair. After five minutes, the experimenter entered the room and administered a VAMS-R along with verbal instructions (see Appendix C) to measure participants' baseline mood. Once complete, the first twenty participants viewed the negative film clip 'Dead Man Walking'. All clips were viewed wearing headphones. Following this, participants completed a VAMS-R to measure the impact of the film clip on mood. Participants then undertook twenty trials of the BART. Instructions were on the computer screen (see Appendix D) and participants were encouraged to ask questions before they began the trials in their own time. When the BART was complete participants viewed the neutral film clip. All film excerpts were referred to as a 'short film clip' so participants were unaware of the genre. Following this clip, another VAMS-R and a further twenty BART trials were completed. Participants were given the opportunity to read the instructions again and ask questions before commencing the trials.

To break up the order of the experiment, the UPPS-P questionnaire was administered after completion of the second BART. Finally, participants watched the positive film clip, followed by the VAMS-R and twenty trials of the BART. At this stage, unless enquired, participants were unaware reward from the BART was hypothetical money. For the first twenty participants the completion of the third BART indicated the end of the experiment. To counterbalance the order, the remaining twenty-one participants viewed the film clips in the order positive, neutral, negative with the additional positive clip 'Wall-E' (Space Dance Scene) to overcome potential ethical issues of showing a negative film clip last. The experiment took approximately forty-five minutes. Once complete, all participants were debriefed and given the opportunity to ask questions.

## Results

Mood Induction.

A one-way Kolmogorov-Smirnov (K-S) test was first conducted to see whether the twelve mood scores (happy, sad and energetic mood ratings for the three independent variables and baseline), six dependent variables and three predictor variables significantly differed from normal distribution. The variables baseline-sad, D(41) = 1.64, p < .009, positive-sad, D(41) = 1.63, p < .010, and negative-happy, D(41) = 1.61, p < .011, significantly differed from a normal distribution. As the variables were mood scores, a non-parametric, repeated-measures Wilcoxon signed-rank Test was conducted

(which does not require the assumption that the population is normally distributed) to investigate whether the film clips were successful in changing mood. The mood manipulations were successful, except for when comparing baseline and positive-sad (p = .102), baseline and neutral-sad (p = .111), baseline and neutral-happy (p = .371) and baseline and neutral-energetic (p = .271). This finding was expected as baseline and neutral-moods were expected to be similar and, thus, show no significant mood shift. Importantly, there were significant mood changes for the remaining comparisons (see Appendix E), demonstrating a significant shift in mood after the film clips.

Difference scores were created to investigate the degree of mood shift from baseline mood and to investigate the direction of mood change for each manipulation. A difference score indicates the amount of change between two variables. Baseline mood was subtracted from each mood condition (positive, neutral, negative) for each rating on the VAMS-R (sad, happy, and energetic). A one-way within-subject analysis of variance (ANOVA) was used as the difference scores were normally distributed. Mauchly's test statistic was checked for all one-way within-subject ANOVA's to see if the data violated the sphericity assumption. If Mauchly's test statistic was not significant (i. e., p > .05), it was assumed variances of the differences between conditions were not significantly different, and the F ratio for Sphericity Assumed was used.

However, when Mauchly's test statistic was significant (i. e., p < .05), it was concluded variances of differences between conditions were significantly different. Since the condition of sphericity was not met, a Greenhouse-Geisser correction was used as it gives rise to a correction factor that is https://assignbuster.com/two-personality-traits-negative-and-positive-

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applied to the degrees of freedom used to assess the observed F-ratio. Additionally, for all one-way within-subject ANOVA's the standardised effect size (partial eta squared;  $\hat{l} \cdot p2$ ) was calculated, stating what proportion of the variance in the dependent variable is attributable to the factor in question. Cohen (1988) suggested that r=.01 be considered a small effect size, r=.06 represents a medium effect size and r=.14 a large effect size, which were adopted in the current study.

The difference scores, negative-sad minus baseline-sad (M= 64. 92, SD= 22. 59), neutral-sad minus baseline-sad (M= 3. 17, SD= 14. 50), and positive-sad minus baseline-sad (M= -1. 68, SD= 7. 80) were created. The one-way within-subjects ANOVA demonstrated statistically significant differences between the three sad difference scores, F(1. 42, 56. 96) = 324. 56, p < .001,  $\hat{l} \cdot p2 = .890$ . A Bonferroni correction was conducted to compare the means of all combinations of the three groups whilst controlling for increased error from conducting a number of comparisons. The Bonferroni correction indicated participants felt significantly sadder in the negative mood induction after the negative clip compared to the neutral (p = .001) and positive mood conditions (p = .001). Participants also felt significantly sadder in the neutral mood condition than in the positive (p = .026).

A one-way within-subjects ANOVA for difference scores of happy showed that the mood ratings in the negative-happy minus baseline-happy (M= -40. 53, SD= 26. 41), neutral-happy minus baseline-happy (M= 3. 04, SD= 37. 40) and positive-happy minus baseline-happy (M= 30. 87, SD= 25. 90) were statistically significant, F(1. 49, 59. 91) = 145. 44, p < .001,  $\hat{l} \cdot p2 = .784$ .

The Bonferroni correction found participants were significantly happier in the https://assignbuster.com/two-personality-traits-negative-and-positive-psychology-essay/

positive mood induction than when in the neutral (p = .001) and negative conditions (p = .001). Additionally, participants were significantly happier in the neutral relative to the negative condition (p = .001).

Similarly, for difference scores of energetic a one-way within-subjects ANOVA showed that mood ratings in the negative-energetic minus baseline-energetic (M= -16. 09, SD= 25. 32), neutral-energetic minus baseline-energetic (M= 4. 92, SD= 26. 83), and positive-energetic minus baseline-energetic (M= 31. 26, SD= 27. 06) were statistically significant, F(2, 80) = 91. 78, p < .001,  $\hat{l} \cdot p2 = .696$ . The Bonferroni correction indicated that participants felt more energetic after watching the positive film clip compared to the neutral (p = .001) and negative (p = .001), and they reported feeling more energetic after the neutral clip than the negative (p = .001). All results are depicted in Figure 2 which shows that the higher mean rating for sad, happy and energetic, the more self-reported mood experienced.

Figure 2. The mean mood rating for sad, happy and energetic after baseline, and the positive, neutral and negative mood manipulations. Error bars represent within-subject error as forecast by Cousineau (2005).

Risk-Taking.

As the mood manipulations were successful in inducing mood, whether this mood shift caused higher risk-taking on the BART was explored. A one-way within-subjects ANOVA suggested the differences between the adjusted average number of pumps on unexploded balloons on the BART after the negative film clip (BART-negative), BART-neutral and BART-positive were https://assignbuster.com/two-personality-traits-negative-and-positive-psychology-essay/

statistically significant, F(1. 60, 64. 12) = 6. 36, p < .005,  $\hat{l} \cdot p2 = .137$ . A significant positive linear trend, F(1, 40) = 7. 89, p < .008, suggested a proportionate change in the value of risk-taking across the three mood conditions (see Figure 3). A Bonferroni correction revealed significant differences in risk-taking between negative and positive (p = .023) and negative and neutral mood conditions (p = .013), but no significant differences between neutral and positive mood conditions (p = .986). These current findings support the hypothesis that risk-taking tendencies would be greater in the positive mood condition compared to the negative, but not the neutral mood induction, which is reflected in Figure 3.

Figure 3. The adjusted average number of pumps for unexploded balloons as measured on the BART after the negative, neutral and positive film excerpts. Error bars represent within-subject error as forecast by Cousineau (2005).

A one-way within-subjects ANOVA suggested the mean differences between the amount earned (hypothetical money) in the negative, neutral and positive mood conditions were significantly different, F(2, 80) = 18.83, p < .001,  $\hat{I} \cdot p2 = .320$ . A Bonferroni correction states significantly greater amount of money was earned in the positive condition compared to the neutral (p = .026) and negative condition (p = .001), and in the neutral compared to the negative mood condition (p = .014), which is reflected in Figure 4.

Figure 4. The mean amount of money gained on the BART after each mood condition. Error bars represent within-subject error as forecast by Cousineau (2005).

#### Mood Correlation.

It has been established that positive mood elicits greater risk-taking than negative mood; however, it is unclear whether mood change underlies this finding. Therefore, a Pearson's correlation coefficient was conducted between two BART difference scores (BART-negative minus BART-neutral; BART-negative minus BART-positive) and two mood difference scores (negative-sad minus neutral-sad; negative-sad minus positive-sad). The difference scores focused on the negative condition as significant differences were detected to the neutral and positive conditions which were not found between neutral and positive. Table 1 shows no significant correlations between any of the BART and mood difference scores. Therefore, people are riskier in a positive mood relative to a negative mood, but that risk-taking is not directly correlated with the mood shift participants experienced.

#### TABLE 1

Pearson's correlation coefficients for the BART and mood change difference scores

BART-negative minus BART-neutral

BART-negative minus BART-positive

Negative-sad minus neutral-sad:

Correlation coefficient

Sig. (2 tailed)

-. 133

- . 408
- -. 096
- . 552

Negative-sad minus positive-sad:

Correlation coefficient

Sig. (2 tailed)

- -. 120
- . 456
- . 033
- . 836

Personality Correlation.

Finally, a Pearson's correlation coefficient was conducted to investigate whether risk-taking could be explained by the measured personality traits.

Table 2 refers to the sample descriptive statistics from the UPPS-P scale.

#### TABLE 2

The mean scores and standard deviation for the self-reported personality traits as measured by the UPPS-P (scores ranged from 1 to 4)

#### Mean score

#### Standard deviation

## Negative urgency

- 2.44
- . 497

### Sensation Seeking

- 2.80
- . 505

## Positive urgency

- 1.95
- . 501

Five difference scores were calculated; BART-negative minus BART-neutral, BART-positive minus BART-neutral, BART-positive minus BART-negative, BART-negative minus the average of BART-positive and BART-neutral, and an average BART score [(BART-neutral + BART-positive + BART-negative)/3]. Table 2 shows no significant correlations between the five BART difference scores and the three personality traits, indicating that, whilst using Pearson's correlation, risk-taking was not from the three impulsive personality characteristics.

#### TABLE 3

Pearson's correlation coefficients for the five BART difference scores and three personality traits

BART-negative minus BART-neutral

BART-positive minus BART-neutral

BART-positive minus BART- negative

((BART-positive + BART-neutral)/2)

- BART-negative

Average BART;

(BART-neutral +

BART-positive + BART-negative)/3

**Negative Urgency:** 

Correlation

coefficient

Sig. (2 tailed)

-. 087

. 589

-. 186

. 245
076
. 636
011
. 948
. 027
. 868
Sensation Seeking:
Correlation
coefficient
Sig. (2 tailed)
055
. 734
234
. 141
133
. 406

062				
. 702				
010				
. 949				
Positive Urgency:				
Correlation				
coefficient				
Sig. (2 tailed)				
. 001				
. 997				
194				
. 224				
142				
. 375				
092				
. 567				
066				

As no significant correlations were found, a Spearman's correlation coefficient was conducted to check for any non-linear relationship. Very similar results were found to the Pearson's correlation, with the exception of BART-positive minus BART-neutral which had a significant negative correlation with sensation seeking (rs = -. 399, p < . 010). This suggests that the higher sensation seeking trait an individual reports, the less difference there is between performance on the BART in the neutral and positive mood conditions. This could be explained by individuals being more risky in the neutral condition. However, a Spearman's correlation coefficient showed no significant correlation between BART-neutral and sensation seeking (rs = . 068, p < . 674).

Although participants were riskier in a positive compared to negative mood, the extent of any mood induced impulsivity does not relate to the self-report trait of positive or negative urgency. There is some hint of a relationship between BART-neutral minus BART-positive and sensation seeking, but this is not from individuals being riskier in a neutral mood and would not survive a Bonferroni correction. Therefore, there is no evidence to support the hypothesis that the higher one is on self-reported negative or positive urgency the higher risk-taking when in that mood state.

# **Discussion**