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RUNNING HEAD: EMOTION REGULATION IN RECOVERED DEPRESSED
INDIVIDUALS

Characteristics of emotion regulation in recovered depressed versus
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Abstract

There is evidence that depressed individuals show a more dysfunctional use of emotion regulation strategies than controls. Some authors have suggested that these deficits are not confined to the acute phase but are a risk factor for the development of recurrent depressive episodes. The study aimed to provide a preliminary test of this hypothesis by comparing 42 students with a history of depression to 42 matched controls using self-report questionnaires. In line with the hypotheses, past depression was related to higher levels of self-perceived emotion regulation difficulties, a more frequent use of dysfunctional emotion regulation strategies and a less frequent use of 'putting things into perspective' as a functional strategy. In exploratory analyses, the groups also differed in emotion acceptance and clarity. As a whole, the results provide preliminary support for the idea that depression vulnerability is related to deficits in emotion regulation.

Keywords: Depression; Vulnerability; Emotions; Emotion regulation

1. Introduction

A number of authors have suggested to conceptualize depressive episodes as consequences of maladaptive emotion regulation (Campbell-Sills & Barlow, 2006; Gross & Muñoz, 1995; Kring & Werner, 2004). According to this view, the symptoms of depression are seen as consequences of individuals' failure to modulate their emotions in an adaptive way. A review of evidence supporting this view is complicated by the fact that emotion regulation is a broad concept that has been defined in different ways (see Gross & Thompson, 2007; Kring & Werner, 2004). It therefore appears necessary to specify which aspects of emotion regulation are in the focus of interest when investigating its role in depression. The current study will focus on *deliberate strategies* used in order to regulate emotions and *self-reported emotion regulation difficulties*.

There is evidence that currently depressed individuals differ from controls regarding their use of emotion regulation strategies. Specifically, they report a more frequent use of strategies that have been found to be related to dysfunctional outcomes (e.g., emotion suppression, rumination, catastrophizing) and a less frequent use of functional strategies (e.g., reappraisal, self-disclosure) (Campbell-Sills, Barlow, Brown, & Hofmann, 2006; Garnefski & Kraaij, 2006; Gross & John, 2003; Rude & McCarthy, 2003). In addition to using a higher amount of dysfunctional strategies, currently depressed individuals were also found to report less understanding and clarity of their emotions (Rude & McCarthy, 2003), to be less acceptant of negative feelings (Campbell-Sills et al., 2006; Hayes et al., 2004) and to express a lower expectancy to be able to adaptively regulate negative emotions than a control group (Catanzaro & Mearns, 1990). These findings may suggest that the excessive use of dysfunctional strategies reported by depressed individuals might be related to broader deficits in emotion functioning.

Some authors have argued that these emotion regulation deficits are not only a concomitant of acute depression but also a more enduring risk factor for the development of repeated episodes (Gross & Muñoz, 1995; Kring & Werner, 2004; Rude & McCarthy, 2003). Given the importance of cognitive factors in depression vulnerability, it is specifically assumed that increased levels of maladaptive cognitive strategies (e.g., rumination, catastrophizing) and difficulties using adaptive cognitive strategies (e.g., reappraisal) aimed at regulating one's emotions should play a key role (Garnefski & Kraaij, 2006). In a non-depressed state, these abnormalities might not interfere with everyday life as increases in negative mood are only moderate. However, when the mood deterioration is more pronounced, e.g., in response to stressful life events, the maladaptive strategies may lead to the maintenance of negative mood and contribute to the development of a depressive episode. Despite potential implications for theory and intervention, only few studies have directly tested this hypothesis. Rumination has repeatedly been found to predict the development and maintenance of depression (Nolen-Hoeksema, 2004). In addition, there is preliminary evidence that past depression is related to broader abnormalities in emotional functioning such as reduced emotional clarity (Rude & McCarthy, 2003) and low expectancies for one's own ability to regulate negative emotions (Kassel, Bornovalova, & Mehta, 2007).

This study aimed to directly test the hypothesis that depression vulnerability is related to dysfunctional patterns of emotion regulation strategies and high levels of self-reported emotion regulation difficulties. In addition, exploratory analyses tested the role of emotion understanding and acceptance in depression vulnerability. Currently non-depressed individuals who had experienced at least one past major depressive episode were compared to matched controls using self-report questionnaires. Specifically, it was expected that recovered depressed participants report (a) a less frequent use of adaptive emotion regulation strategies, (b) a more frequent use of maladaptive strategies and (c) higher levels of self-reported difficulties in emotion regulation when compared to controls.

2. Method

2.1 Participants

Participants were 84 currently non-depressed university students, half of which had experienced at least one major depressive episode in the past ('recovered depressed' group), whereas the other half were matched controls ('never depressed' group). Individuals suitable for participation were identified using an online screening questionnaire, which was completed by $N = 1,159$ students and assessed inclusion criteria for four different studies. Inclusion criteria for the recovered depressed group were: A current Beck Depression Inventory (BDI) score ≤ 11 ; at least one past major depressive episode according to the Structured Clinical Interview for the DSM-IV (SCID); age between 20 and 45. Exclusion criteria were: Current major depressive episode; current suicidal thoughts; history of psychosis or mania; self-injurious behavior. For every recovered depressed participant tested, a never depressed control participant matched by age and gender was identified from the screening sample and also tested. The groups did not differ in sex, age, marital status or BDI scores (see Table 1). Participants in the recovered depressed group had experienced on average 2.2 depressive episodes ($SD = 2.1$).

2.2 Assessment of Depression

In order to assess current and past episodes of major depression or mania, the affective disorders module of the *Structured Clinical Interview for the DSM-IV (SCID)* (German version: Wittchen, Wunderlich, Gruschwitz, & Zaudig, 1997) was conducted by trained interviewers. Individuals meeting criteria for a current major depressive episode and/or a current or past episode of mania were excluded. In order to prevent individuals with past subclinical depression levels from entering the 'never depressed' group, participants were also excluded if they reported a past depressive episode of 2 weeks, in which criterion A1 (depressed mood) or A2 (loss of interest) was fulfilled but only three or four depression

symptoms were present. The remaining participants were allocated to the 'recovered depressed' and 'never depressed' groups according to the SCID results.

The *Beck Depression Inventory (BDI)* (German version: Hautzinger, Bailer, Worall, & Keller, 1995) assessed current symptom levels of depression. The BDI is a 21-item self-report questionnaire of depression severity with established reliability and validity in clinical and non-clinical samples (Hautzinger et al., 1995). Following norms given by Hautzinger et al. (1995), individuals scoring higher than 11 were excluded.

2.3 Measures of Emotion and Emotion Regulation

Emotion regulation strategies and associated variables. The *Cognitive Emotion Regulation Questionnaire (CERQ)* (Garnefski, Kraaij, & Spinhoven, 2001) was used to measure functional and dysfunctional emotion regulation strategies. The CERQ comprises 36 items assessing cognitive strategies used for emotion regulation, which are rated on a scale from '1' (*sometimes*) to '5' (*always*). The nine subscales are *self-blame* (e.g., "I feel that I am the one to blame for it"), *other-blame* (e.g., "I feel that others are to blame for it"), *rumination* (e.g., "I dwell upon the feelings the situation has evoked in me"), *catastrophizing* ("I continually think how horrible the situation has been"), *putting into perspective* (e.g., "I tell myself there are worse things in life"), *positive refocusing* (e.g., "I think about pleasant experiences"), *positive reappraisal* (e.g., "I think I can learn something from the situation"), *acceptance* (e.g., "I think that I have to accept the situation") and *refocus on planning* (e.g., "I think of what I can do best"). The authors report good internal consistencies, re-test reliabilities, factorial and construct validities (Garnefski, Kraaij, & Spinhoven, 2002). The German translation (Mohr, 2006) was validated in a sample of $N = 136$ non-clinical participants (Ehring, in preparation). The factor structure could be replicated using a principal component analysis (PCA) with varimax rotation. Apart from *focusing on planning* ($\alpha = .53$), all subscales showed adequate internal consistencies ($.75 < \alpha < .89$). The construct validity of

the measure was supported by significant correlations with other emotion regulation measures. Internal consistencies were adequate in the current study ($.72 < \alpha < .85$), apart from the subscale *focusing on planning* ($\alpha = .45$), which was therefore not included in the analyses.

The *Difficulties in Emotion Regulation Scale* (DERS; Gratz & Roemer, 2004) was used to assess self-reported emotion regulation difficulties. Six subscale scores can be computed from the 36 items, namely *nonacceptance of emotions* (6 items; e.g., “When I’m upset, I feel guilty for feeling that way”), *difficulties engaging in goal-directed behavior when distressed* (5 items; e.g., “When I’m upset, I have difficulty concentrating”), *impulse control difficulties* (6 items; e.g., “When I’m upset, I become out of control”), *lack of emotional awareness* (6 items; e.g., “I pay attention to how I feel” [reversed]), *limited access to emotion regulation strategies* (8 items; “When I’m upset, it takes me a long time to feel better”) and *lack of emotional clarity* (5 items; “I am confused about how I feel”). Participants rate each item on a scale from ‘1’ (*almost never, 0 – 10%*) to ‘5’ (*almost always, 91 – 100%*). The authors describe good psychometric properties for all subscales, e.g., adequate to good internal consistencies (α 's $> .80$) and stabilities (ρ_{tt} 's $> .69$) and significant correlations with other emotion regulation measures (Gratz & Roemer, 2004). The DERS was translated into German by the first author, back-translated in order to establish the equivalence of the English and German language versions and validated in a sample of 429 clinical and non-clinical participants (Ehring, in preparation). In a PCA with promax rotation, the factor structure was replicated and the six factors accounted for 64% of the total variance. All scales showed good internal consistencies ($.81 < \alpha < .95$) and stabilities over a period of 2 weeks ($N = 131$; $.72 < r_{tt} < .87$). Finally, significant and substantial correlations between the DERS scales and similar measures were found. Internal consistencies of the DERS subscales in the current study were adequate to good ($.76 < \alpha < .87$).

Emotion intensity. Intensity of emotions experienced in the weeks prior to the study was assessed with the *Positive and Negative Affect Schedule (PANAS)*; German version: Krohne, Egloff, Kohlmann, & Tausch, 1996). The PANAS is a self-report measure assessing positive and negative affect on two separate scales. It consists of a list of 10 adjectives describing positive affect (e.g., “happy”) and 10 adjectives describing negative affect (e.g., “frightened”) that are rated on a scale from ‘1’ (*very slightly or not at all*) to ‘5’ (*extremely*). Participants were asked to report their affect ‘*in the past weeks*’. The PANAS has been shown to be possess high internal consistencies, stability and validity (Krohne et al., 1996). In this study, the subscales showed acceptable to good internal consistencies (negative affect: $\alpha = .78$; positive affect: $\alpha = .85$).

2.4 Procedure

Individuals meeting inclusion and exclusion criteria were invited for a session. After participants had given informed consent, the SCID interview was conducted. Next, participants filled in the questionnaires (BDI, PANAS, DERS, CERQ). Participants later also underwent an experimental procedure, which will be described elsewhere.

2.5 Data Analyses

Six dependent variables were skewed and normalized via logarithmic transformations prior to analyses (DERS subscales ‘nonacceptance’, ‘impulse control deficits’, ‘limited access to strategies’ and ‘lack of clarity’; CERQ subscales ‘self-blame’ and ‘catastrophizing’). Results did not differ for untransformed and transformed variables. For reasons of readability, descriptives are given for untransformed variables.

Diagnostic groups were compared with *t* tests and ANCOVAs. When hypotheses were tested with several dependent variables, the significance level of $\alpha = .05$ was corrected following the Bonferroni procedure. A logistic regression analysis was used to test how well

'past depression' status can be predicted by characteristics of emotion regulation and which variables predict unique variance.

3. Results

3.1 Test of Hypotheses

It was expected that recovered depressed individuals would report significantly higher levels of dysfunctional strategies, lower levels of functional strategies and higher levels of self-reported difficulties in emotion regulation than controls. Descriptives and results of *t* tests for these variables are shown in Table 2. As each hypothesis was tested with several dependent variables, Bonferroni corrections were performed to prevent α -inflation, i.e., for each hypothesis, the α -level of .05 was divided by the number of dependent variables used.

The recovered depressed group showed significantly higher ratings for the dysfunctional strategies 'rumination' and 'catastrophizing', but not 'self-blame' and 'other-blame'. In the analyses focusing on functional strategies, significant differences were found on one variable, namely 'putting into perspective'; recovered depressed individuals reported to use this strategy less frequently than controls. No group differences emerged regarding the variables 'positive reappraisal' and 'positive refocusing'.

Finally, recovered depressed individuals yielded significantly higher scores on the DERS subscales assessing self-reported emotion regulation problems than controls ('limited access to strategies' and 'difficulties goal-directed behavior'), whereas the groups did not differ significantly regarding 'impulse control deficits' after Bonferroni correction.

3.2 Exploratory Analyses

Additional exploratory analyses were conducted to test whether participants differed in other emotion-related variables (see Table 3).

When looking at acceptance of negative emotions, diverging results emerged for the two scales used: Whereas recovered depressed individuals reported significantly less acceptance than controls on the DERS subscale, no group differences were found on the CERQ subscale.

The groups did not differ regarding the degree of positive and negative mood experienced in the past week according to the PANAS. In addition, no difference regarding emotion awareness was found. However, recovered depressed participants reported to perceive their emotions as significantly less clear than control participants.

3.3 Controlling for Negative Mood, Acceptance and Clarity

Although results were not significant after Bonferroni correction, there was a trend in that recovered depressed individuals tended to report higher levels of negative mood than controls. Therefore, ANCOVAs were conducted in order to test whether there were still significant group differences when levels of negative mood (PANAS) were statistically controlled. Group differences remained significant for the variables ‘DERS – limited access to strategies’, $F(1, 81) = 11.55, p < .01, \eta_p^2 = .13$, ‘DERS – difficulties goal-directed behavior’, $F(1, 81) = 12.43, p < .01, \eta_p^2 = .13$, ‘CERQ – rumination’, $F(1, 81) = 10.26, p < .01, \eta_p^2 = .11$ and ‘DERS – acceptance’, $F(1, 81) = 8.69, p < .01, \eta_p^2 = .10$. Group differences on the following variables still showed medium effect sizes but ceased to be significant at the Bonferroni-corrected significance levels when the PANAS subscale ‘negative mood’ was statistically controlled for: ‘CERQ – putting into perspective’, $F(1, 81) = 5.81, p = .02, \eta_p^2 = .07$, ‘CERQ – catastrophizing’, $F(1, 81) = 5.75, p = .02, \eta_p^2 = .07$, ‘DERS – lack of clarity’, $F(1, 81) = 4.29, p = .04, \eta_p^2 = .05$.

We also tested whether results still held when the two variables with significant group differences in the exploratory analyses, namely ‘DERS – nonacceptance’ and ‘DERS- lack of clarity’ were entered as covariates. Results did not change for any of the variables assessing

dysfunctional strategies and self-reported emotion regulation problems. However, the difference between the groups regarding the functional strategy ‘CERQ – putting into perspective’ ceased to be significant when controlling for ‘DERS – lack of clarity’, $F(1, 81) = 3.62, p = .06, \eta_p^2 = .04$.

3.4 Logistic Regression

In order to test how well depression vulnerability status can be predicted by emotion regulation problems, a logistic regression analysis with ‘past depression’ (1 = yes; 0 = no) as the dependent variable was computed. All five emotion regulation variables showing significant group differences when testing the hypotheses were included as predictors. In the resulting logistic regression model, 71.7% of the cases were correctly classified as individuals with vs. without past depression. Two variables emerged as significant predictors in the model, namely ‘DERS – difficulties goal directed behavior’, $B = .16, SE B = .07, Wald(1) = 5.03, p < .05$ and ‘CERQ – rumination’, $B = .23, SE B = .08, Wald(1) = 8.16, p < .01$.

4. Discussion

This study aimed to test the hypothesis that individuals vulnerable to depression – operationalized by the presence of past major depressive episodes – report using more dysfunctional and less functional emotion regulation strategies as well as experiencing more difficulties in emotion regulation than never depressed controls. The hypothesis was based on the idea that deficits in emotion regulation are an enduring risk factor for the development of recurrent depressive episodes.

In line with the hypotheses, recovered depressed participants reported to experience significantly higher difficulties regulating their negative emotions, to more frequently use the dysfunctional strategies rumination and catastrophizing and to less frequently use the positive strategy of putting things into perspective than controls. These findings were very robust as

they were still significant after Bonferroni correction and remained significant and/or still showed high effect sizes when negative mood was statistically controlled. In addition, in a logistic regression analysis predicting depression vulnerability status, these variables allowed to correctly classify 72% of the cases. Taken together, the results are consistent with the idea that depression vulnerable individuals attempt to regulate their emotions in a more dysfunctional way and perceive their emotion regulation as less successful than controls.

However, the hypotheses were not supported for all variables. Specifically, the groups did not differ regarding the use of the functional strategies ‘positive reappraisal’ and ‘positive refocusing’, which contradicts earlier findings with currently depressed individuals (Garnefski & Kraaij, 2006; Gross & John, 2003). Similarly, the dysfunctional strategies self- or other-blame did not significantly differ between the groups after Bonferroni correction. The results of the current study therefore suggest that excessive cognitions of blame and a lack of cognitive reappraisal might be confined to acute depression.

In addition to testing the hypotheses, exploratory analyses were conducted on a number of variables related to emotion functioning. Results showed that recovered depressed individuals reported to perceive their emotions as less clear than controls. Findings regarding acceptance of negative emotions were mixed in that significant differences emerged in one questionnaire (DERS) but not the other (CERQ). When comparing the items of the two instruments, it becomes immediately apparent that they measure quite different aspects of acceptance: Whereas the DERS clearly focuses on the failure to accept one’s *emotions* (example item: “When I’m upset, I feel ashamed with myself for feeling that way”), the CERQ assesses the degree to which individuals try to accept the *situation* that has caused the emotions to arise (example item: “I think that I have to accept the situation”). These two aspects can be clearly distinguished and our data suggest that a lack of acceptance of negative *internal* events, and not external ones, is related to depression vulnerability. Interestingly, this is in line with theoretical models on this issue (e.g., Hayes, Luoma, Bond, Masuda, & Lillis,

2006; but see also Sturman & Mongrain, in press, for evidence that lack of acceptance of defeating events might also contribute to depression vulnerability).

At first sight, it may seem puzzling that although depression vulnerable individuals reported significantly more emotion regulation difficulties and appear to use dysfunctional emotion regulation strategies more frequently than controls, the two groups did not differ regarding the levels of negative emotion experienced. However, the finding is entirely consistent with the idea that emotion regulation deficits do not have a major impact when variations in mood are only of moderate intensity. The prediction would be that it is only when the deterioration of mood is more pronounced that the dysfunctional use of emotion regulation strategies leads to the maintenance of negative mood, for two reasons: Firstly, persistent high levels of negative emotions often interfere with daily functioning. This can be expected to motivate individuals to use emotion regulation strategies more intensely, which may then lead to the dysfunctional effects. Secondly, low to moderate levels of negative emotions in everyday life show a lot of natural fluctuation due to changes in the environment, even when individuals are not very effective in actively regulating their emotions. Therefore, it can be argued that the effects of different emotion regulation strategies should be most notable when high levels of negative emotion are experienced that do not return to baseline levels very quickly (e.g., in response to negative life events). Although the present findings are in line with these ideas, future studies will need to directly test them, e.g., by using a prospective longitudinal design and/or ambulatory assessment of emotion regulation strategies and mood in participants' daily lives.

In addition, future research should also investigate the reasons why depression vulnerable individuals adopt dysfunctional emotion regulation strategies. Some authors argue that dispositional variables (e.g., temperament, negative emotionality) in interaction with dysfunctional patterns of interpersonal relationships in early developmental stages are responsible (Gross & Muñoz, 1995). In addition, a reduced willingness to experience negative

emotions has been suggested as the core variable underlying dysfunctional forms of emotion regulation (e.g., Hayes, Wilson, Gifford, & Follette, 1996; Rude & McCarthy, 2003).

If the finding of dysfunctional emotion regulation strategies in depression vulnerability is further supported in future research, this might have implications for treatment and relapse prevention. Whereas traditional cognitive approaches typically emphasize the modification of the cognitive *content*, a number of authors have suggested that it is more important to change the *relationship* towards one's inner experiences, including thoughts, emotions and bodily sensations (Hayes et al., 2006; Teasdale, 1999). If depression vulnerability is indeed related to dysfunctional forms of emotion regulation, treatment approaches appear promising that aim at the promotion of adaptive forms of emotion regulation (see Barlow, Allen, & Choate, 2004) and/or the reduction of excessive attempts to control negative emotions and the promotion of acceptance and mindfulness towards one's inner experiences (see Hayes et al., 2006; Teasdale et al., 2000).

The current study has a number of strengths, including the comparison of carefully matched groups. Nevertheless, because of a number of limitations the results of the study need to be regarded as preliminary until they have been replicated. The main limitation certainly lies in the exclusive reliance on self-report and the use of a cross-sectional design. Future studies should aim to use experimental procedures and more objective measures, e.g. psychophysiological variables (see Giese-Davis, Conrad, Nouriani, & Spiegel, 2008) to extend the findings. Because of the cross-sectional design, we cannot rule out alternative explanations for the findings, e.g., that differences between the groups may be the consequence of past depression in the sense of a scar effect or may even be due to symptom contamination as recovered depressed participants have experienced more intense emotion in the past than controls. Future prospective studies could clarify this issue. In addition, it would be interesting to include a currently depressed group in future research and compare it to recovered depressed and never depressed individuals. Finally, the CERQ used to assess

emotion regulation exclusively focuses on *cognitive* strategies. However, additional strategies have been described in the literature that should be included in future research, such as emotion suppression, deliberate emotion expression or social sharing of emotion (Gross & John, 2003; Zech & Rimé, 2005).

Despite these limitations, the current study provides preliminary evidence that individuals vulnerable to depression show a more dysfunctional use of emotion regulation strategies than controls, which, if replicated in future studies, may have important implications for theoretical models and treatment of depression.

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Table 1

Sample Characteristics

		Never depressed	Recovered depressed		
		<i>N(%) or M(SD)</i>	<i>N(%) or M(SD)</i>	<i>Statistic</i>	<i>p</i>
Sex	female	29 (69%)	29 (69%)	$\chi^2(1, N = 84) = 0$	1.00
	male	13 (31%)	13 (31%)		
Age		24.24 (4.38)	24.74 (4.53)	$t(82) = -.51$.61
Marital status	single	30 (71.4%)	24 (57.1%)	$\chi^2(1, N = 84) = 1.87$.26
	married	12 (28.6%)	18 (42.9%)		
BDI		3.83 (3.21)	4.60 (3.17)	$t(82) = - 1.10$.28

Table 2

Group Differences: Emotion Regulation Strategies and Difficulties

	Never depressed	Recovered depressed			
	<i>M(SD)</i>	<i>M(SD)</i>	<i>t (df = 82)</i>	<i>p</i>	<i>d</i>
<i>Dysfunctional strategies</i>					
CERQ – self-blame	8.93 (3.02)	9.71 (3.22)	-1.14	.25	.25
CERQ – rumination	10.38 (3.44)	12.95 (2.90)	-3.70*	<.001	.82
CERQ- catastrophizing	6.19 (2.31)	7.71 (2.97)	-2.69*	<.01	.59
CERQ – other-blame	6.17 (1.96)	7.33 (2.79)	-2.14	.03	.47
<i>Functional strategies</i>					
CERQ – positive reappraisal	13.98 (3.96)	13.60 (3.77)	.45	.65	.10
CERQ – positive refocusing	10.02 (3.14)	10.29 (3.65)	-.35	.73	.08
CERQ – putting into perspective	14.17 (3.54)	12.21 (3.47)	2.55*	.01	.56
<i>Self-reported emotion regulation problems</i>					
DERS – limited access to strategies	12.52 (4.80)	16.50 (5.46)	-3.95*	<.01	.87
DERS – difficulties goal-directed behavior	10.79 (4.48)	14.57 (3.90)	-4.14*	<.001	.91
DERS – impulse control deficits	9.17 (3.94)	10.38 (3.17)	-2.07	.04	.46

* Significant after Bonferroni correction

d = Cohen’s estimate of effect size; DERS = Difficulties in Emotion Regulation Scale;

CERQ = Cognitive Emotion Regulation Questionnaire

Table 3

Group Differences: Associated Variables

	Never depressed	Recovered depressed			
	<i>M(SD)</i>	<i>M(SD)</i>	<i>t (df = 82)</i>	<i>p</i>	<i>d</i>
<i>Awareness and clarity</i>					
DERS – lack of awareness	15.53 (3.91)	13.88 (4.04)	1.90	.06	.42
DERS – lack of clarity	8.71 (2.22)	10.07 (2.55)	-2.56*	.01	.57
<i>Acceptance</i>					
DERS –nonacceptance	9.67 (2.87)	11.93 (3.50)	-3.36*	<.01	.74
CERQ – acceptance	12.93 (3.20)	12.40 (3.25)	.74	.46	.16
<i>Intensity</i>					
PANAS positive	33.67 (5.60)	32.21 (5.67)	1.18	.24	.26
PANAS negative	15.68 (3.71)	17.45 (4.37)	-2.00	.05	.44

* Significant after Bonferroni correction

d = Cohen’s estimate of effect size; PANAS = Positive and Negative Affect Schedule;

DERS = Difficulties in Emotion Regulation Scale; CERQ = Cognitive Emotion Regulation

Questionnaire