The Relation between Anxiety, Automatic Thoughts Adjustment and Emotional Control

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Abstract

Introduction: *Iancu et al. (2015) conducted a study on the relation between positive and negative thoughts and social anxiety. They underlined the fact that people suffering from social anxiety experienced the environment as threatening and dangerous. Mustafaraj (2015) guided a research on the importance of automatic thoughts upon generalised anxiety. The results indicated that, after interpreting the role-playing games, patients were able to assess themselves and to change dysfunctional thoughts, emotions and behaviours.*

Objectives: *The objective of this research is to highlight the relation between anxiety (its perceived level), automatic thoughts adjustment and emotional control.*

Methods: *Three psychometric instruments were used for evaluation, namely, Taylor Manifest Anxiety Scale (Taylor, 1953), Automatic Thoughts Questionnaire – ATQ (Hollon and Kendall, 1980), State Emotion-Regulation Questionnaire (Kashdan and Steger, 2006), which were applied to a number of 25 people (31-60 years old, 19 women and 6 men), participants in the personal development groups. The questionnaires were filled in between 14:00 and 20:00, a timeframe when a personal development group or another course did not take place.*

The dependent variables were: emotion suppression, cognitive reappraisal, desire for change, negative self-concepts and negative expectations, low self-esteem, helplessness, and perceived anxiety.

Results: *The research hypotheses (the assumption that there is a statistically significant correlation between the level of perceived anxiety and automatic thoughts adjustment, between the level of perceived anxiety and emotional control, and respectively, between automatic thoughts adjustment and emotional control) were partially confirmed to a threshold of significance $p<0.05$.*

Conclusions: *Hypothesis confirmation has the support of literature approaching the relationship between variables: emotion suppression, cognitive reappraisal, desire for change, negative self-concepts and negative expectations, low self-esteem, helplessness, and perceived anxiety. Research findings represent starting points for further research on regulating negative emotions through automatic thoughts and anxiety.*

Keywords: automatic thoughts, emotions control, self-esteem, personal maladjustment

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I. Introduction

Anxiety disorders represent a topic of great interest in terms of research, starting with the study of anomalies that appear as early as the period of childhood and adolescence (Vasey and MacLeod, 2001; Muris and Field, 2008). An important factor for a child's harmonious development and his (her) preparation for adult life may also be represented by negative emotions and thoughts that the person experienced during childhood, which can further affect in a negative way: life as an adult, his (her) society behaviour, and their own perception about the environment. Thus, in order to demonstrate the direct relation between negative thoughts and anxiety, Schniering and Rapee (2002) developed a scale that measures anxiety and automatic thoughts in children, showing that the level of anxiety is increased in children who exhibit negative thoughts about the situations in which they feel threatened or in cases of personal failures.

Also, Živčić-Bećirević and Anić (2001) used an automatic thoughts questionnaire for students (1999) in a study concerning the relation between automatic thoughts, school success, satisfaction, and efficiency from students. 279 students participated in this study, and the result showed that positive thoughts and relationship with parents predict success, and that positive thoughts, relationship with parents and motivation predict students' satisfaction and efficiency.

Froeseler, Santos and Teodoro (2013) performed a theoretical synthesis regarding the psychological tools that measure automatic thoughts. Thus, the authors identified a number of 23 original instruments, some of which are aimed at children, adolescents and the evaluation of positive thoughts.

Beck & Dozois (2011), cited by Froeseler, Santos and Teodoro (2013), opinionated that cognitive schemas and automatic thoughts are formed during childhood and are made up of beliefs that we have about ourselves, about the world and about the future.

Anxiety also continues to manifest itself among adults, which is linked by Clark and Wells (1995) with excessive attention and thoughts that occur before and after a certain event considered important and correlate with the negative representation about ourselves within that event.

Iancu et al. (2015) conducted a study on the relation between positive and negative thoughts and social anxiety. They underlined the fact that people suffering from social anxiety experienced the environment as threatening and dangerous.

Mustafaraj (2015) guided a research on the importance of automatic thoughts upon generalised anxiety. The results indicated that, after interpreting the role-playing games, patients/clients were able to assess themselves and to change dysfunctional thoughts, emotions and behaviour.

Gilles and Jenson (2013) developed a guide approaching a new direction in the way of thinking. One of the goals of this guide was to help young people become aware of the importance of positive thinking and the build-up of both self-image and the perception of any type of disability as being positive.

Amen PhD, cited by Gilles and Jenson (2013), presents 8 main stages in the way of thinking: thoughts are real and have impact; thoughts affect our body; positive thoughts affect the body; the body reacts to every thought; negative thoughts contaminate our mind; negative thoughts do not always reflect the truth; always get ready for a response to automatic negative thoughts; remove negative thoughts as much as possible.

II. Objectives

The objective of this research is to highlight the relation between anxiety (its perceived level), automatic thoughts adjustment, and emotional control.

Hypothesis

1. We assume that there is a statistically significant correlation between the desire for change and the emotion suppression.
2. We assume that there is a statistically significant correlation between the desire for change and cognitive reappraisal.
3. We assume that there is a statistically significant correlation between negative self-concepts and negative expectations and cognitive reappraisal.
4. We assume that there is a statistically significant correlation between negative self-concepts and negative expectations and emotion suppression.
5. We assume that there is a statistically significant correlation between self-esteem and cognitive reappraisal.
6. We assume that there is a statistically significant correlation between helplessness and cognitive reappraisal.
7. We assume that desire for change is a predictor for perceived anxiety.
8. We assume that cognitive reappraisal is a predictor for perceived anxiety.

III. Methods

There were 25 participants aged between 31 and 60 years (Mean = 40.64; S.D. = 10.30), 19 women and 6 men, attendees in the personal development groups.

Instruments

1. Taylor Manifest Anxiety Scale (Taylor, 1953) has a number of 28 items, with dichotomous answers.
2. Automatic Thoughts Questionnaire – ATQ (Hollon and Kendall, 1980) presents a number of 30 items on a Likert scale from 1 to 5.
3. State Emotion-Regulation Questionnaire (Kashdan and Steger, 2006) includes a number of 8 items on a Likert scale from 1 to 7.

Procedure

The questionnaires were applied maintaining the anonymity of the subjects, the research ethic conditions and General Data Protection Regulation (EU) 2016/679 (GDPR). Each participant signed an informed consent and the agreement for data to be used for research purposes. The questionnaires were filled in between 14:00 and 20:00, a time when a personal development group or another course did not take place.

Experimental design

Research variables were dependent variables: emotion suppression, cognitive reappraisal, desire for change, negative self-concepts and negative expectations, low self-esteem, helplessness, and perceived anxiety.

IV. Results

In table 1, descriptive statistics, the means and standard deviations for variables can be noted: emotion suppression, cognitive reappraisal, desire for change, negative self-concepts and negative expectations, low self-esteem, helplessness, and perceived anxiety.

Table 1. Descriptive Statistics

	Mean	Std. Deviation	N
Emotion suppression	12.3600	8.69329	25
Cognitive reappraisal	23.0000	5.25198	25
Desire for change	9.4000	3.26599	25
Negative self-concepts and negative expectations	8.8800	3.04576	25
Low self-esteem	2.1200	.60000	25
Helplessness	2.3200	.94516	25
Perceived anxiety	10.5200	3.72066	25

In table 2, we can observe that there is a statistically significant correlation between the following variables: cognitive reappraisal and desire for change (r=.488; p<0.05), negative self-concepts and negative expectations and desire for change (r=.717; p<0.01), low self-esteem and desire for change (r=.676; p<0.01), helplessness and desire for change (r=.551; p<0.01), perceived anxiety and desire for change (r=.644; p<0.01), and between perceived anxiety and cognitive reappraisal (r=.505; p<0.01).

Table 2. Correlations between variables[1]

		Emotion suppression	Cognitive reappraisal	Desire for change
Emotion suppression	Pearson Correlation	1	-.045	.062
	Sig. (2-tailed)		.832	.768
	N	25	25	25
Cognitive reappraisal	Pearson Correlation	-.045	1	.488*
	Sig. (2-tailed)	.832		.013
	N	25	25	25
Desire for change	Pearson Correlation	.062	.488*	1
	Sig. (2-tailed)	.768	.013	
	N	25	25	25
Negative self-concepts and negative expectations	Pearson Correlation	.213	.115	.717**
	Sig. (2-tailed)	.308	.585	.000
	N	25	25	25
Low self-esteem	Pearson Correlation	.351	.079	.676**
	Sig. (2-tailed)	.086	.706	.000
	N	25	25	25
Helplessness	Pearson Correlation	.249	-.034	.551**
	Sig. (2-tailed)	.230	.873	.004
	N	25	25	25
Perceived anxiety	Pearson Correlation	-.231	.505**	.644**
	Sig. (2-tailed)	.266	.010	.001
	N	25	25	25

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

In table 3, we can observe a statistically significant correlation between negative self-concepts and negative expectations and helplessness (r=.882; p<0.01), between negative self-concepts and negative expectations and low self-esteem (r=.966; p<0.01) and

between helplessness and low self-esteem (r=.811; p<0.01).

Table 3. Correlations between variables[2]

		Negative self-concepts and negative expectations	Low self-esteem	Helplessness
Emotion suppression	Pearson Correlation	.213	.351	.249
	Sig. (2-tailed)	.308	.086	.230
	N	25	25	25
Cognitive reappraisal	Pearson Correlation	.115	.079	-.034
	Sig. (2-tailed)	.585	.706	.873
	N	25	25	25
Desire for change	Pearson Correlation	.717**	.676**	.551**
	Sig. (2-tailed)	.000	.000	.004
	N	25	25	25
Negative self-concepts and negative expectations	Pearson Correlation	1	.966**	.882**
	Sig. (2-tailed)		.000	.000
	N	25	25	25
Low self-esteem	Pearson Correlation	.966**	1	.811**
	Sig. (2-tailed)	.000		.000
	N	25	25	25
Helplessness	Pearson Correlation	.882**	.811**	1
	Sig. (2-tailed)	.000	.000	
	N	25	25	25
Perceived anxiety	Pearson Correlation	.366	.251	.188
	Sig. (2-tailed)	.072	.226	.369
	N	25	25	25

** Correlation is significant at the 0.01 level (2-tailed).

In table 4 are shown the multiple correlation coefficient (R=.644) and the determination coefficient (R Square =.415).

Table 4. Multiple correlation and determination coefficients

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644[a]	.415	.389	2.90779

a. Predictors: (Constant), desire for change

b. Dependent Variable: perceived anxiety

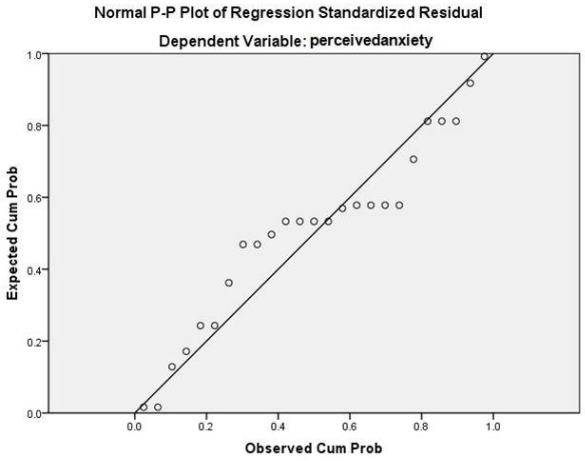
In table 5, it can be observed that desire for change is a statistically significant predictor (p<0.01) for perceived anxiety variable. Thus, the regression model is: perceived anxiety = 3.624 + .734 x desire for change.

Table 5. The coefficients in the regression equation[1]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.624	1.805		2.008	.056
	Desire for change	.734	.182	.644	4.037	.001

a. Dependent Variable: perceived anxiety

Fig. 1. Graphical representation of the predicted and the observed values having perceived anxiety as criteria and desire for change as predictor



In table 6 we can observe the coefficients R and R Square value (R=.505; R Square =.255).

Table 6. Multiple correlation and determination coefficients

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.505[a]	.255	.223	3.27966

a. Predictors: (Constant), cognitive reappraisal

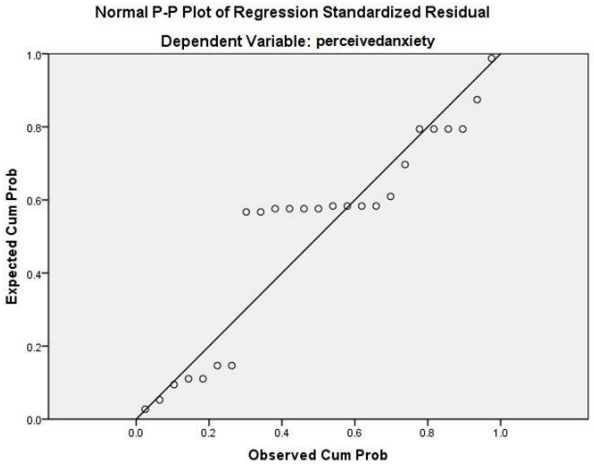
b. Dependent Variable: perceived anxiety

In table 7 we can observe how cognitive reappraisal variable is a statistically significant predictor for anxiety (p<0.01). Thus, the regression equation will be: perceived anxiety = 2.286 + .358 x cognitive reappraisal.

Table 7. The coefficients in the regression equation[2]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.286	3.004		.761	.454
	cognitive reappraisal	.358	.127	.505	2.809	.010
a. Dependent Variable: perceived anxiety						

Fig. 2. Graphical representation of the predicted and the observed values having perceived anxiety as criteria and cognitive reappraisal as predictor



V. Discussion and conclusions

Following the obtained results' analysis, the hypotheses regarding bivariate correlation were confirmed concerning the following variables: cognitive reappraisal and desire for change, negative self-concepts and negative expectations and desire for change, low self-esteem and desire for change, helplessness and desire for change, negative self-concepts and negative expectations and helplessness, and between negative self-concepts and negative expectations, and low self-esteem.

Considering the regression models applied, it can be said that both the desire for change variable and the cognitive reappraisal variable are predictors for perceived anxiety.

To support these results, other authors have also found that negative thoughts have a predictive value for anxiety (Iancu et al., 2015; Pirbaglou et al., 2013; Muris and Field, 2008; Kendall and Treadwell, 2007; Perini et al., 2006; Vasey and MacLeod, 2001; Ronan et al., 1994).

We can assume that it comes naturally for any psychologically healthy individual to want to evolve in all areas of life and seek to improve their well-being, and those plans require, most of the time, important changes, new life events and situations that can all determine the anxiety occurrence, emotional stress and a multitude of mostly negative thoughts concerning the future. Thus, the way of thinking, the ability to remove negative thoughts and to build a positive image about oneself and the environment represents the basis for a harmonious and balanced somatic, emotional and spiritual life. Furthermore, an effort is required from the individuals to understand themselves, to adapt to the belonging environments and to open up to the surrounding world, because a man "cannot understand what he does not accept and cannot accept what he is disproving" (Mitrofan and Nuţă, 2005, p. 128).

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