Dimensions of Anxiety Symptoms in Romanian Young Adult Subjects from Brasov County

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Abstract:
This paper is the result of a research that examined, analyzed and interpreted the dimensions of anxiety symptoms in a sample of young adult subjects in community settings that never seek for medical and psychiatric help for those symptoms. The study utilized Anxiety Sensitivity Index- Revised 36, a self-report scale with six sub-scales assessing fear and anxiety symptoms. The data was analyzed by using statistical elements. The findings have suggested that greatest part of the subjects experienced low levels of anxiety and statistically significant correlation between subscales developed to more adequately assess the somatic dimensions of anxiety sensitivity.

Key-Words: anxiety symptoms, dimensions of anxiety, community settings

1 Introduction

It was only in the more predictable conditions of the industrial developed world that the anxiety symptoms could be seen as an abnormal response to a relatively unthreatening world. Before that, the anxiety symptoms have not been perceived as a mental illness in it's own right, but rather more as a social stress and a possible cause of mental illness [1].

2 A historical approach of anxiety

Anxiety symptoms throughout the ninetieth and into the first half of the twentieth century were often described within the medical model on an individual basis, related to their presentation (Da Costa described the irritable heart, Lewis effort and Oppenheimer the neuro-circulatory syndrome) [2]. Westphal also incorrectly used the medical model to explain "platzschwindel", which has since been renamed agoraphobia. He mistakenly identified this inability to cross open spaces unaccompanied as an abnormality of the sense of balance resulting from inner-ear pathology. Later, Legrand and Saulle refined this concept by correctly identifying that the sufferer did in fact have a fear of losing his balance rather than an actual balance problem [1].

In 1880, Beard proposed the existence of neurasthenia or mental exhaustion. This was characterized by severe tiredness of sudden onset, in the absence of organic abnormality, which was speculated to be caused by the increasingly frenetic pace of life in an industrialized country. Some 15 years later, Freud (1953) published his paper separating anxiety neurosis from neurasthenia. Morbid anxiety, i.e. anxiety in the absence of an external threat, was the basis of this separation. Originally, Freud suggested that the anxiety neurosis was a manifestation of undischarged libidinal energy. Freud's influence over the categorization of anxiety was still clearly evident in the Diagnostic and Statistical Manual of Mental Disorders 3rd edition (DSM III 1980). Later, the concept of neurosis was removed from the DSM IV [3] because of the atheoretical stance that this diagnostic manual took. The concept of anxiety neurosis being the product of intrapsychic conflict could not be substantiated. The current diagnostic categories of anxiety disorders in DSM IV and the International Classification of Mental and Behavioral Disorders 10th revision (ICD 10) [4] are: panic disorder, agoraphobia, social anxiety disorder (SAD), post-traumatic stress disorder (PTSD), generalized anxiety disorder (GAD) and obsessive-compulsive disorder (OCD).

3 Epidemiology of anxiety disorders

Both the ECA [5] and the National Comorbidity Survey (NCS) [6] have shown a bimodal distribution in the age of panic disorder, the first peak of onset being in the age group of 15-24 years and the second in the age group of 45-54 years. The prevalence of panic disorder was greater in women than in men; people who have been educated for more than 16 years had a ten times smaller risk of having a panic disorder than those who have been educated for up to 12 years [6]. Other risk factors include being divorced or widowed and living in an urban area.

The prevalence of GAD appears to be even higher in clinical settings, particularly in primary care settings. Shear et al 1994 found prevalence rates of GAD, reported by patients at four primary care centers, to be twice as high as those reported in community samples (i.e. 10% vs. 5.1%).

The prevalence of OCD symptoms in the general population has been found to be remarkably high worldwide (2%) (USA, Canada, Latin America, Europe, and New Zealand, Asia).With these findings, OCD has been placed prevalence-wise between major depressive disorder and schizophrenia.

The prevalence of PTSD symptoms in the general population shows large differences across studies, often attributed to differences in the screening methods and instruments used. Among a sample from a health maintenance organization (HMO), who were of moderate socio-economic status (SES) and relatively young [7], lifetime prevalence of trauma exposure was about 39%.

The annual incidence for types of anxiety disorders in USA shows the following: 1,7% for panic disorder, 2,3% for OCD, 3.6% for PTSD, 3,7% for social phobia, 2,8% for GAD.

4 Research method and design

The study was an exploratory analysis in which we collected information using a self-administered questionnaire Anxiety Sensitivity Index- Revised 36 (ASI-R 36) [8]. The questionnaire was developed to more adequately assess the somatic, cognitive and social dimensions of anxiety sensitivity. The participation in the study was voluntary and it was considered that the consent to participate was given by the subjects when they completed the questionnaire (59 subjects completed the questionnaire). The ASI-R 36 is a rating self-report with the main purpose of assessing anxiety sensitivity in adults and adolescents, which can be completed in five minutes. The scale possesses six sub-scales assessing fear of cardio-vascular symptoms (CV), respiratory symptoms (R), gastro-intestinal symptoms (GI), publicly observable anxiety reactions (social anxiety/AS), dissociative and neurological symptoms (DN), and fear of cognitive dyscontrol (C). Items are rated on a 5 points scale, ranging from 0 (very little) to 4 (very much); a total score (range 0-144) for the scale is obtained by summing all items.

5 Research findings

The subject target group comprise 64 subjects (59 subjects completed the questionnaire) with mean age 32.84 years (range 21-43 years, Std. Deviation 6.09), balanced for gender (51.6% males and 48.4 % females).

Analysis of the sample shows that 63 (98.4%) subjects have anxiety symptoms and the greatest part of the subjects experienced low levels of anxiety on all sub-scales as you can see on table 1.

As we can notice the highest level of anxiety was on publicly observable anxiety reactions sub-scale (ASI_R36_AS).

Table 1 ASI-R-36 Subscales Frequency

Levels	AS		R		CV	
	f	%	f	%	f	%
Low	**42**	**65.6**	**44**	**68.8**	**48**	**75**
Medium	13	20.3	14	21.9	10	15.6
High	**4**	**6.3**	**1**	**1.6**	**1**	**1.6**
Total	59	92.2	59	92.2	59	92.2
Missing	5	7.8	5	7.8	5	7.8
Total	64	100	64	100	64	100

Levels	C		DN		GI	
	f	%	f	%	f	%
Low	**51**	**79.7**	**51**	**79.7**	**56**	**87.4**
Medium	8	12.5	8	12.5	3	4.8
High	**59**	**-**	**-**	**-**	**-**	**-**
Total	64	92.2	59	92.2	59	92.2
Missing	5	7.8	5	7.8	5	7.8
Total	64	100	64	100	64	100

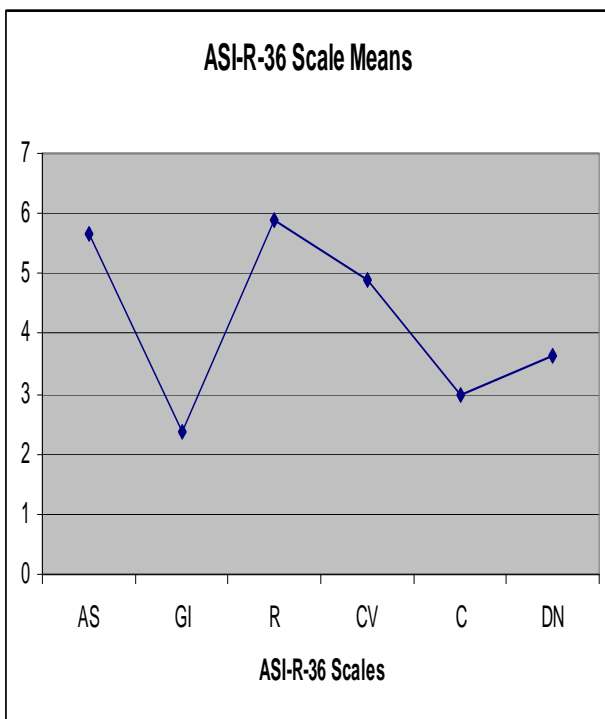On each subscale the means of scores was less than 6 points from 24 points as you can see on figure 1.

ASI-R-36 Scale Means

Fig.1 ASI-R-36 Scale Means

Subscale	Correlation	ASI-R 36
ASI-R 36	Pearson Correlation	1
	Sig. (2-tailed)	
ASI_R36_AS	Pearson Correlation	.702**
	Sig. (2-tailed)	.000
ASI_R36_GI	Pearson Correlation	.836**
	Sig. (2-tailed)	.000
ASI_R36_R	Pearson Correlation	.909**
	Sig. (2-tailed)	.000
ASI_R36_CV	Pearson Correlation	.891**
	Sig. (2-tailed)	.000
ASI_R36_DN	Pearson Correlation	.892**
	Sig. (2-tailed)	.000
ASI_R36_C	Pearson Correlation	.842**
	Sig. (2-tailed)	.000
	N	59

Table 2 Pearson correlations between the general level of anxiety on ASI-R-36 and all the sub-scales

Statistical analysis of the sample did not show any statistically significant correlation between the level of anxiety on ASI-R-36 and the social-demographic characteristics (gender, age, marital status) of subjects. We could not notice any correlations between the level of anxiety on ASI-R-36 and the professional status of the subjects or between the level of anxiety on ASI-R-36 and substance (alcohol, nicotine) use.

There is a high statistical Pearson correlation between the general level of anxiety on ASI-R-36 and all the sub-scales analyzed

In the same time some subscales shows statistically significant correlation between them:
- ASI_R36_GI with ASI_R36_R, ASI_R36_CV, ASI_R36_DN
- ASI_R36_C with ASI_R36_DN
- subscale ASI_R36_AS show no significant correlation with any other subscale

6 Conclusions

The major conclusion of the study are that Romanian young adult subjects from Brasov County show that the greatest part of the subjects (98,4%) experienced low levels of anxiety on all sub-scales.

As we can notice the highest level of anxiety was only on publicly observable anxiety reactions sub-scale.

We could not notice any correlations between the level of anxiety and the social-demographic characteristics or substance (alcohol, nicotine) use.

In the same time some sub-scales developed to more adequately assess the somatic dimensions of anxiety sensitivity shows statistically significant correlation between them while social dimension of anxiety sensitivity, fear of cognitive dyscontrol and dissociative and neurological symptoms show no correlation with other sub-scales.

This observation could support the imagines correlations with the two sets of brain areas that seem to be activated in anxiety and which in essence may represent the essential circuites of the anxiety responses.

The first set, that comprises the supragenual anterior cingulate, the orbito-frontal cortex, the insulae, the cerebellum and often, but not always medial temporal structures (amygdala, parahippo-campal girus) are areas that are directly involved with the evaluation of noxious stimuli and which

produce autonomic responses when stimulated.

The second set of activations represents areas of sensory or polymodal association cortex and the basal ganglia activation.

Overall, this set of data has to be considered as pilot data to be used to guide hypothesis generation.

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