Άγχος για την καρδιακή λειτουργία και επιθετικότητα στην κρίση πανικού

ΠΕΡΙΛΗΨΗ

Η κρίση πανικού ενσωματώνει την τάση του ατόμου να αντιλαμβάνεται τις σωματικές αισθήσεις ως απειλητικές και επικίνδυνες. Σκοπός της παρούσας έρευνας ήταν η διερεύνηση της σχέσης του αγχούς με επικέντρωση στην καρδιακή λειτουργία και στην επιθετικότητα σε άτομα που έχουν υποστεί κρίσεις πανικού. Το δείγμα της μελέτης καθορίστηκε να αποτελέσουν 145 άτομα, (N=145), εκ των οποίων 23 (16%) ήταν άνδρες και 122 (84%) γυναίκες, που έχουν υποστεί έστω και μια φορά στην ζωή τους κρίσεις πανικού. Η διαπίστωση των επεισοδίων, έγινε ύστερα από διαγνωστική συνέντευξη, σύμφωνα με τα κριτήρια του DSM-V. Στους συμμετέχοντες χορηγήθηκαν τα εξής ερωτηματολόγια α) το Cardiac Anxiety Questionnaire και β) το Hostility and Direction of Hostility Questionnaire. Από τα αποτελέσματα της μελέτης, διαπιστώθηκε μια θετική διασύνδεση του αγχούς της καρδιακής λειτουργίας με την τάση για επιθετικότητα, στα άτομα με κρίση πανικού και παρατηρήθηκε πως η αυξανόμενη σωματοποίηση της αντιληπτικής επικινδυνότητας των καρδιακών αισθήσεων, είναι δυνατό να εμπλέκεται στην αύξηση της ροής προς επιθετικές μορφές συμπεριφοράς, είτε προς τον εαυτό είτε προς τους άλλους. Μια περαιτέρω διερεύνηση του φαινομένου κρίνεται απαραίτητη, τόσο σε επίπεδο μηχανισμών, όσο και σε επίπεδο των επιπτώσεων της σχέσης αυτής, στην κλινική πράξη.

Λέξεις-κλειδιά: άγχος για την καρδιακή λειτουργία, επιθετικότητα, κρίση πανικού, φόβος, σωματοποίηση
The relationship between cardiac anxiety and hostility in panic attack patients

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ABSTRACT

Panic attack is based on the belief that bodily sensations such as palpitations or discomfort may produce harmful consequences. It also, considered to be an episode of incredibly intense fear or apprehension that is of sudden onset. The objective of present study was to investigate the relationship between heart focused anxiety and hostility in this diagnostic group. In addition it was been considered of how this connection can be used within both diagnostic and treatment issues. 145 individuals (23 male and 122 female) suffering from panic attack, at least once in their life, participated to the present study. The diagnosis of the attacks is held according to the DSM-V criteria. The measures used were: a) The Cardiac Anxiety Questionnaire (CAQ), B) The Hostility and Direction of Hostility Questionnaire (HDHQ) and c) A questionnaire concerning socio-demographic information. A positive correlation among fear of cardiac sensations and intropunitiveness and/or extrapunitiveness were observed in this target group. Higher levels of heart focused anxiety were connected with a hostile attitude, either against the others or against their-selves. Further research should be provide the ego-mechanisms as well as the relevant consequences of this relationship in clinical practice.

Keywords: heart focused anxiety, hostility, panic attack, fear, somatization

INTRODUCTION

Panic disorder has its roots in the syndrome Da Costa, which was observed on soldiers during the American civil war (Kaplan & Sadocks, 1998). It is estimated that up to 4% of the population suffers from severe panic disorder (Taylor, 2006). The disorder as an anxiety disorder is characterized by recurring severe panic attacks (Kaplan & Sadocks, 1998, Taylor, 2006). Panic attack is a sudden period of intense anxiety, psychological stimulation, fear, stomach disorder and sickness which is linked to a variety of bodily and mental symptoms (Manos, 1997). Typically, the incidents appear suddenly, while there may be no specific reason, however there are also always occurring under specific situations (ex. when one is at a crowded place-agonophobia) (APA, 1994). It may also include significant behavioral change lasting at least a month and of ongoing worry about the implications or concern about having other attacks. The latter are called anticipatory attacks (APA, 1994; Taylor, 2006; Faytout, et al., 2007).

By a cognitive process this fear and anxiety is in the direction of «something bad will happen to us», which is accompanied by the feeling of helplessness (APA, 1994). According to this approach, the unexpected attacks arise from the fear of anxiety and the oversensitivity to bodily senses, like heartbeats, sickness or nausea, and it is due to false beliefs developed by individuals with that disorder (Reiss & McNally, 1985; Lucock & Morely, 1996). These false beliefs incorporate the individual’s perception that body reactions to anxiety lead to harmful or dangerous consequences (Reiss & McNally, 1985). In other words, the individuals suffering from this disorder are possessed by an intense fear of having a heart-attack, fainting or losing their self-control (APA, 1994).
In this spirit Eifert (1992) suggested that especially bodily sensitivity to heart focused anxiety (HFA) seems to be correlated to more special ways in the development of panic disorder (Eifert et al., 1992, 1999; Eifert & Forsyth 1996). Believing that this sensitivity is included in the fear of anxiety coming from the twisted beliefs towards an imminent threat (ex. fast pulsation) (Reiss & McNally, 1985), heart focused anxiety includes specifically the fear of heart sensations (Eifert, 1992; Taylor & Cox, 1998; Eifert et al., 1999). Particularly, it has been proven both in theory (Cox, 1996; McNally & Eke, 1996; Reiss & McNally, 1985) and in research that this specific anxiety sensitivity to the fear of heart senses holds a vital role in the development, explanation and prevalence of this specific disorder (Zvolensky & Eifert, 2000). Thus, it has been proven that the individuals with high levels of heart focused anxiety develop a tendency to become more anxious, to be in a situation of constant threat (Beitman, et al., 1987; Eifert, 1992), and to significantly avoid taking up activities which cause strenuous heart function (Aikens et al., 1999; Lethem, Slade, Troup, & Bentley, 1983).

Some researchers regard excessive heart focused anxiety, known also as heart nervousness, as a type of panic disorder (Maier et al. 1985; Hoffmann & Hochapfel, 1984). As a result, the alarm system of “fight-or-flight response” remains open permanently (Kim & Gorman, 2005). Because in these cases the feeling of the threat remains, becomes long-lasting, pathological and in this way causes an unpleasant feeling of worriment for «next time» (Armfield, 2006). This hypothesis, regarded also by the psycho-biological theories, is that the crisis of panic is caused by the activation of the biological mechanism of fear (Kim & Gorman, 2005). This primitive form of protection of «fight-or-flight» bears a cost: it constitutes the corner-stone of a constant anxiety, of an emerging fear of anxiety, which Barlow characterized as «the phenomenon of the false alarm» (Barlow, 2000).

Panic attack affect each person differently. One of the ways which people follow in an attempt to protect their-selves, is the display of hostile attitude, either against the others or against their-selves (Stemmler, et al., 2007). It is a common finding that hostility (struggle reaction), as much as the way they connect to each-other, gave us the opportunity to compose the present paper. Therefore, the general aim of the present study was to investigate the relationship between the physicality of anxiety, with regard to the heart focused anxiety, and the hostility, to individuals that have suffered of panic attacks. Specifically, the targets are as follow:

a. To find the levels of heart focused anxiety and hostility which individuals with crisis of panic suffer.

b. To find the relationships among physical oversensitivity to heart focused anxiety and several demographic features (sex, age, marital status and so on).

c. To investigate the potential relationships among heart focused anxiety and several psychological features, of which hostility to be more specific.

d. To investigate potential differences between the two gender.

Subjects
The sample of our study was determined to be consisted of 145 individuals (N= 145), members of the community, of which 23 (16%) were male and 122 (84%) female, all of whom have suffered for at least once in their-lives of panic attack. This difference does not constitute a sampling error, as the sickness occurs two to three times more often to women than men (Reed & Wittchen, 1998; Joyce, Bushnell & Browne, 1989). The diagnosis of the panic attacks followed the DSM-V criteria. The additional conditions for including the individuals in the study were:

1. Patients age be bigger than 18 years old.
2. Patient's will and written consent to participate in the present study.
3. The decision of whether the conditions for participation in the study were met, was to be made by the researchers of the present paper.

Procedure
All of those who met the criteria filled in a set of questionnaires, in the presence of the researchers and after they were informed about the purpose of the study. All the questionnaires were anonymous and completed by the participants in a manner of their choice. Each individual created a secret, personal code, with which he participated in the study (instead of using his/her name).

The questionnaires were collected in the period September 2009 – January 2010. The percentage of answered questions was 100%.

The design of the study included the assessment of psychological features regarding heart focused anxiety and hostility. The researchers handed over to the participants the self- report instruments of the study in an envelope, which the individual gave afterwards sealed (self-present), the questionnaires having been filled in, in order to maintain the privacy. At the same time, their demographic data were listed searched enough. Moreover the lacking of research data in the Greek area, which refer to the heart focused anxiety and the hostility in the panic crisis, as much as the way they connect to each-other, gave us the opportunity to compose the present paper. Therefore, the general aim of the present study was to investigate the relationship between the physicality of anxiety, with regard to the heart focused anxiety, and the hostility, to individuals that have suffered of panic attacks. Specifically, the targets are as follow:

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d. To investigate potential differences between the two gender.

MATERIAL AND METHOD
According to the above-mentioned, the relationship among several features of personality, such as heart focused anxiety in panic disorder has not been
in a separate paper. Researchers were at the disposal of the participants for clarifying things, if needed.

Material
Particularly, for the completion of the study the followed research tools were employed:

1. The Cardiac Anxiety Questionnaire (CAQ; Eifert et al., 2000)
Cardiac anxiety questionnaire was designed to measure the anxiety of the bodily senses with regard to the heart function (Eifert, Thompson et al., 2000). It is a self-report questionnaire which was recently standardized in Greece (Dragioti, Vitoratou, Kaltsouda, Tsartsalis & Gouva, unpublished) and is consisted of 10 sentences which describe dimensions relevant to the bodily senses of the heart function on a five-degree Likert scale, which is extended from “never” (0) until “always” (5). CAQ provides a total result along with three results of its subscales regarding (1) the fear and worry for chest pain, (2) the avoidance of subscales regarding (1) the fear and worry for chest pain, and (3) the focus on heart function (Dragioti et al., unpublished). The higher score in the CAQ, provides greater the heart focus anxiety (Zvolensky et al., 2003). This tool is being used in the international research field to patients with heart diseases (Hoyer, et al, 2008) or panic disorder as much as to healthy populations to search for the fear for this sickness (Eifert & Forsyth, 1996). Cronbach's alpha index of CAQ applied to the Greek data in our sample gave 0.825 (Dragioti et al., unpublished).

2. Hostility and Direction of Hostility Questionnaire (HDHQ; Caine et al., 1967)
HDHQ is a self-report instrument that access hostility and the direction of hostility. HDHQ consists of 5 subscales in the 52 features of the Minnesota Multiphasic Personality Inventory (MMPI). Three subscales, the acting-out hostility (AH), criticism of others (CO) and paranoid hostility (PH) refer to the extrapunitiveness (Caine et al., 1967). Two subscales, self-criticism (SC) and Guilt (G) refer to the intropunitiveness and constitute measures of self-punishment. The sum of all five subscales reflects the total hostility (Caine et al., 1967). Researchers for the validity in clinic samples have resulted in significant correlations between HDHQ and the observable rhythms of the nurses' anger (Blackburn et al., 1979). The validity of the questionnaire parameters has been confirmed by several studies. HDHQ has been applied to the normal Greek population (Economou & Angelopoulos, 1989), to mental (Lyketsos et al., 1978) and to somatic patients (Drosos et al., 1989).

Demographics
All participants were asked to complete these self-report instruments and provided their demographic details (age, gender, marital status, educational qualification and employment).

Statistical analyses
For the description of the sample’s social, demographic and psychological characteristics, distribution frequencies, means and standard deviations were performed. The parametric independent student T test was adopted to compare men’s and women’s scores on the quantitative variables (Gnardellis, 2006), since their distribution was symmetric [Kolmogorov-Smirnov (sign.>5%)]. The interactions among cardiac anxiety and the rest of the independent variables (age, marital status, educational level and employment) were examined by one way ANOVA (Gnardellis, 2006). Pearson correlation coefficients were used to examine links between heart focused anxiety and hostility (Papaioannou & Ferentinos, 2000; Ioannidis, 2000). Then multiple linear regression analysis is used to test whether socio-demographic characteristics mediate—that is, reduce the regression coefficient indexing—the link between heart focused anxiety and hostility (Gnardellis, 2006).

The statistical analysis concerning the descriptive characteristics of the variables examined were performed by SPSS 14 (SPSS, 2005). For all statistical analysis p<0.05 was considered as statistically significant.

RESULTS
Social-demographic profile of the sample
The average age of the sample was 34.98 ± 11.52, ranging 19-70 with the greater percentage (84%) of the sample being female. As far as their marital status is concerned, the biggest percentage were single (53.8%). Regarding the educational level and professional condition, the biggest percentage in the participants had graduated from technical institutes or from universities and were civil servants (37.9% and 33.1% correspondingly). The social-demographic profile of our sample, along with the answers in the questions that were posed in the social-demographic data questionnaire, are presented analytically in table 1.

Heart Focused Anxiety
The average of the heart focused anxiety was 1.16 ± 0.62, without having statistically significant difference among gender in their comparison with the t-Test (p=.707). Table 2 presents analytically the results for the heart focused anxiety, with comparison for the sex, as it is measured by the CAQ. To compare the two distributions (male and female) the t-Test has been used. The differences between men and women concerning the overall index of anxiety sensitivity on heart stimulants, as much as among the subscales, have not been significant.

Hostility and Direction of Hostility Questionnaire (HDHQ)
As we can see, also in table 2, the average of the total hostility was 20.19 ± 6.67, with a statistically significant difference (p<0.10) between the two gender in their comparison with the t-test (p=.084). Moreover, statistically significant difference (p<0.05) resulted between the two sexes in the acting-out hostility (p=.032). Men declared higher levels of
TABLE 1
Sample characteristics

<table>
<thead>
<tr>
<th>Total N=145 (100.0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGE</strong> 34.98 ± 11.52</td>
</tr>
<tr>
<td>Distribution frequencies</td>
</tr>
<tr>
<td>Male 23 (16.0%)</td>
</tr>
<tr>
<td>Female 122 (84.0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAMILY STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single 78 (53.8%)</td>
</tr>
<tr>
<td>Marital 57 (39.3%)</td>
</tr>
<tr>
<td>Divorced 7 (4.8%)</td>
</tr>
<tr>
<td>Widowed 3 (2.1%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATIONAL BACKGROUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary School 10 (6.9%)</td>
</tr>
<tr>
<td>High School 32 (22.0%)</td>
</tr>
<tr>
<td>University Degree 55 (38.0%)</td>
</tr>
<tr>
<td>Post Graduate 11 (7.6%)</td>
</tr>
<tr>
<td>Graduate Studies 37 (25.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed/Student 37 (25.5%)</td>
</tr>
<tr>
<td>Housekeeping 10 (6.9%)</td>
</tr>
<tr>
<td>Self-Employed 15 (24.1%)</td>
</tr>
<tr>
<td>Private Sectors 35 (24.1%)</td>
</tr>
<tr>
<td>Public Sectors 48 (33.1%)</td>
</tr>
</tbody>
</table>

AGE is expressed as Mean ± Standard deviation

acting-out hostility. Finally, statistically significant difference (p<0.10) has been found in the criticism of others (p=.098) and in total hostility (p=.084) with men exhibiting higher means than women, while there has been no statistically significant difference between men and women in the rest of the forms.

Levels of heart focused anxiety in reference to age, marital status, educational level and profession

In order to continue the analysis, the relationship between the overall index of anxiety and the demographic data was investigated. The interactions among the overall index of the heart focused anxiety and the rest of the independent variables (age, marital status, educational level and profession) were examined using a series of variance analysis (ANOVA) (Gnardellis, 2006). The effect of the marital status was in total significant (F=2.366, p=.074), while there were no statistically significant differences concerning age, educational level and employment (F=1.392, p=.095 F=1.347, p=.233 και F=1.088, p=.365, correspondingly). Under the Bonferroni criterion, in further analysis of the above-mentioned effect, it was found that singles and widowers have higher oversensitivity to heart focused anxiety.

Correlations among the questionnaires

Correlations among the total score of the CAQ and the hostility and its forms have been drawn using Pearson’s parametric coefficient r (Gnardellis, 2006; Paraskevopoulos, 1993). The values of the correlations that have resulted, are given in table 3. After examining the correlations between the total grade of the CAQ and the HDHQ, statistically very significant correlation (p< 0,001) has been found between CAQ and: paranoid hostility (r=.277 και p=.001), self-criticism (r=.280 και p=.001), intropunitiveness (r=.291 και p=.000), and total hostility (r=.326 και p=.000). Statistically significant correlation (P< 0,01) has been found between CAQ and: guilt (r=.246 και p=.003), extrapunitivity (r=.258 και p=.002), and criticism of others (r=.219 και p=.008).
### TABLE 2
Means and standard deviations with t tests differences among gender

<table>
<thead>
<tr>
<th>Scores of variables</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Differences</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (S.D.)</td>
<td>Mean (S.D.)</td>
<td>Mean (S.D.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear CAQ</td>
<td>1.11 ± 0.94</td>
<td>1.10 ± 0.82</td>
<td>1.10 ±0.84</td>
<td>.920</td>
<td></td>
</tr>
<tr>
<td>Avoidance CAQ</td>
<td>1.33 ± 0.62</td>
<td>1.47 ± 0.75</td>
<td>1.45 ±0.73</td>
<td>.325</td>
<td></td>
</tr>
<tr>
<td>Attention CAQ</td>
<td>0.89 ± 0.74</td>
<td>0.97 ± 0.69</td>
<td>0.96 ±0.70</td>
<td>.627</td>
<td></td>
</tr>
<tr>
<td>Total CAQ</td>
<td>1.11 ± 0.60</td>
<td>1.16 ± 0.63</td>
<td>1.16±0.62</td>
<td>.707</td>
<td></td>
</tr>
<tr>
<td>Criticism of Others</td>
<td>6.52 ±2.23</td>
<td>5.73 ± 2.06</td>
<td>5.86 ± 2.10</td>
<td>.098</td>
<td></td>
</tr>
<tr>
<td>Acting-Out Hostility</td>
<td>5.52 ± 2.39</td>
<td>4.52 ± 1.95</td>
<td>4.68 ± 2.05</td>
<td>.032</td>
<td></td>
</tr>
<tr>
<td>Paranoid Hostility</td>
<td>2.30 ± 1.84</td>
<td>2.39 ± 2.01</td>
<td>2.38± 1.97</td>
<td>.844</td>
<td></td>
</tr>
<tr>
<td>Self-Criticism</td>
<td>5.17 ± 2.32</td>
<td>4.53 ± 1.91</td>
<td>4.63±1.98</td>
<td>.157</td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td>2.87 ± 1.98</td>
<td>2.59 ± 1.72</td>
<td>2.63±1.76</td>
<td>.488</td>
<td></td>
</tr>
<tr>
<td>Extrapunitiveness</td>
<td>14.35 ± 4.57</td>
<td>12.65 ± 4.55</td>
<td>12.92 ± 4.58</td>
<td>.103</td>
<td></td>
</tr>
<tr>
<td>Intropunitiveness</td>
<td>8.04 ± 4.08</td>
<td>7.12 ± 3.25</td>
<td>7.27±3.40</td>
<td>.235</td>
<td></td>
</tr>
</tbody>
</table>

CAQ= Cardiac Anxiety Questionnaire

### TABLE 3
Pearson correlation coefficients between CAQ and HDHQ scores, total sample.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Fear CAQ</th>
<th>Avoidance CAQ</th>
<th>Attention CAQ</th>
<th>Total CAQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criticism of Others</td>
<td>.248**</td>
<td>.019</td>
<td>.250**</td>
<td>.219**</td>
</tr>
<tr>
<td>Acting-Out Hostility</td>
<td>.064</td>
<td>-.013</td>
<td>.164*</td>
<td>0.85</td>
</tr>
<tr>
<td>Paranoid Hostility</td>
<td>.268***</td>
<td>.031</td>
<td>.348***</td>
<td>.277***</td>
</tr>
<tr>
<td>Self-Criticism</td>
<td>.223**</td>
<td>.196*</td>
<td>.269***</td>
<td>.280***</td>
</tr>
<tr>
<td>Guilt</td>
<td>.168*</td>
<td>.138**</td>
<td>.323***</td>
<td>.246**</td>
</tr>
<tr>
<td>Extrapunitiveness</td>
<td>.258**</td>
<td>-.001</td>
<td>.339***</td>
<td>.258**</td>
</tr>
<tr>
<td>Intropunitiveness</td>
<td>.218*</td>
<td>.187*</td>
<td>.325***</td>
<td>.291***</td>
</tr>
<tr>
<td>Total Hostility</td>
<td>.289***</td>
<td>.094</td>
<td>.339***</td>
<td>.326***</td>
</tr>
</tbody>
</table>

* p<0.05  ** p<0.01  *** p<0.001

### Regression analysis
For further examination of that correlation we proceeded in multiple regression analysis. The results of the analysis, after controlling for age and gender, showed that the heart focused attention ($\beta = .286, p=.025$) is the only factor which exhibited independent and statistically significant correlation with the expression of the total hostile behavior. The final model explained the 29% of the variance in the total hostility of the whole sample.

### DISCUSSION
In the presented study the relationship between the heart focused anxiety and the hostility to individuals with panic attacks, was examined. This research is a first approach in developing the concept of fear for heart stimulations and its connection with hostility, as a type of defense for the ego against an imaginary threat, such as the unexpected incidents of panic. Compared to international research, our results show that the level of the senses anxiety caused by the heart function, as much as the levels of hostility, do not seem to be dependent features of this diagnostic group. This finding is in accordance with results from previous research, which suggest that emotional reactions such as anxiety and hostility, constitute part of a more general conceptual category known as Neurotism (McCrae, 1991).

In other words, as Eifert (1992) suggested, the concept of the heart focused anxiety is one of the important factors which is linked with symptoms of panic disorder. Actually, this special oversensitivity in physical symptoms and stimulants, is a causal factor for many other clinical diseases, apart from the panic disorder, like the fear of illness, special fears, somatizations and pain disorders (Zvolensky, Goodie, McNeil, Sperry, & Sorell, 2001; Zvolensky, Eifert, Feldner, & Feldner-Leen, 2003; Zvolensky, Feldner, Eifert, Vujanovic, & Solomon, 2008). On the other hand, hostility has also been found to be independent
factor of incurring panic crisis. According to research findings the patients with panic disorder do not differ significantly in hostility, as opposed to those who do not have any (Maria, 2001).

Furthermore, we examined the relationship of both heart focused anxiety and hostility, compared to gender. The results of the analysis did not produce any difference between men and women regarding anxiety measured by CAQ. This finding complies with Eifert's research (1992-2000) and contradicts previous studies which suggest that women have higher levels of anxiety and avoidance (Kessler, McGonagle, Zhao, Nelson, Hughes, Eshleman, Wittchen, & Kendler, 1994; Schmidt & Koselka, 2000). Perhaps, this has to do with the nature of the panic disorder itself. In relevant research, from the sex point of view, there has been no difference in the anxiety that overwhelms the person living such a crisis (Maier & Buller, 1988; Eaton, Kessler, Wittchen & Magee, 1994).

As far as hostility is concerned, it seems that men differ statistically significantly from women in acting-out hostility. Moreover, an indicatively significant difference was observed in the criticism of others and in total hostility, between the two sexes, with men exhibiting higher percentages than women in these specific types of hostile attitude. This confirms the findings of other researches concerning hostility. For example, Toldos (2005) has found in one of his studies that men report bigger percentages of bodily and oral hostility than women. An explanation of this finding entails losing control due to the sickness. It seems like the sickness is affected also by the social factors of the male icon. Another interpretation that could be implemented, in further analysis. With regards to the analysis of covariance, there were no significant correlations with the total cardiac anxiety and the demographic characteristics in people diagnosed with panic attacks. Intercorrelations were present, only in the case of marital status, where the unmarried and widowed showed a tendency to a grater cardiac anxiety sensitivity. The fact that these people could be having poor interpersonal relationships, may explain the results. This evidence is in accordance with the opinion that the individuals with low social support and difficulties in their family hold higher levels of insecurity and thus are more susceptible to canceling (Foulds, 1967) such as the threat of a disease.

At the end, in this study the relationship between heart focused anxiety and hostility was observed. It seems that elevated levels of heart focused anxiety are connected with a hostile attitude, either against the others or against their-selves. Consequently, the curative group is needed to keep their eyes fixed on those patients (Kaplan, Sadock & Grebb, 1994). Concerning the clinical practice of the current study, we denote that the high levels of hostility and particularly towards intropunitiveness, may be eminent in suicide-related problems in persons diagnosed in panic attacks, as a means to eliminate the discomfort suffered by the individual with panic disorder (Kaplan, Sadock & Grebb, 1994). Secondly, we will see quite often these patients to visit the emergencies, many times during the day, terrified and complaining that they will die (Reiss & McNally, 1985). Thirdly, the individuals with high levels of anxiety and cardiac symptoms often seek out for multiple and alternate treatments in order to be relieved (Eifert, 2000). Thus, it is purposeful especially the curers to deepen to the identification of the individual with high levels of anxiety and bodily oversensitivity to it. The curative group reflects to the patient, in a symbolic level, the family. Having been trained in practices of handling the anxiety as much as in forms of psychological support, they can play an important role as being a healing model for the patient, reducing in that way his anxiety, along with his hostility that comes from it. In this point of view, the need for health professionals to evaluate this relationship and apply relevant information to the therapeutic regimen is apparent. Finally, a future research area may be extended to underline the ego-
mechanisms as well as the relevant consequences of this relationship.

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REFERENCES


