RELATIONSHIP BETWEEN TEMPERAMENT AND ANXIETY DISORDERS: A SYSTEMATIC REVIEW

LIOTTA MARCO¹

¹ Department of Human and Social Sciences, University of Messina, Italy

Email corresponding author: mliotta@unime.it

Abstract: The relationship between anxiety disorders and personality traits, in their temperamental and character dimensions, has been the subject of numerous studies using the dimensional approach of the psychobiological personality. The aim of this review was to identify temperamental and character traits linked both to anxiety symptoms and to specific anxious disorders comparing the data obtained from studies using the two forms of Cloninger temperament and character inventory (TCI and TCI-R). Besides the study aimed to identify, through the comparison of data, the most appropriate model to represent the relationship between personality traits and anxiety disorders. Results showed a high direct correlation between the temperamental dimension of Harm Avoidance and anxiety symptoms and an high inverse correlation between the character dimension of Self-Directedness and anxiety symptoms. Moreover specific anxiety disorders has showed typical correlation with specific temperamental and character traits. The comparison between the longitudinal studies argues in favor of a “precursor model” of explanation of these correlations whereby personality can be used to individuate early manifestations of anxiety disorder.
1. INTRODUCTION

Anxiety disorders are among the most common mental disorders worldwide with a lifetime prevalence of up to more than 20% (Alonso et al. 2004; Kessler et al. 2005; de Graaf et al. 2012) and an annual incidence rate of 3% among adults (Bijl et. al 2002). They are regarded an important health problem (Kessler et al. 2005;) given their often chronic course and effects on both physical health and occupational functioning (Bruce et al. 2005) which significantly compromise quality of life (Mendlowicz & Stein 2000). According to the Diagnostic and Statistical Manual of Mental Disorders DSM (American Psychiatric Association 2000) anxiety disorders are differentiated between panic disorder, agoraphobia, specific phobia, social anxiety disorder, generalized anxiety disorder, obsessive compulsive disorder and post traumatic stress disorder. The etiology of these mental disease is generally multicausal comprising an interaction of genetic (Domschke & Deckert 2012; Gregory & Eley 2011; Smoller et al. 2009) and psychosocial factors (Faravelli et al. 2012; Degnan et al. 2010; Gothelf et al. 2004). In particular many authors showed the importance of temperaments trait underlying a correlation between shy, inhibited and/or emotional temperament and anxious disorders (Degnan et al. 2010; Lindhout & Hoogendijk 2009; Pérez-Edgar & Fox 2005; Lonigan et al. 2004; Anthony et al. 2002; Vasey & Dadds 2001) that appears largely independent from psychosocial factors (Hirshfeld-Becker et al. 2004).

The aim of this review was to identify temperamental and character traits linked to the different anxious disorders comparing the data obtained from studies using Cloninger temperament and character inventory (TCI).

TCI is a self-administered dimensional questionnaire constructed to assess the basic dimensions of personality identified by the Unified Biosocial Theory of Personality, which postulates that personality is structured around four primary temperament dimensions and three character dimensions (Cloninger et al. 1994).

Cloninger and his colleagues (Cloninger, 1986, 1987; Cloninger, et al. 1993; Svrakic et al. 1993; Cloninger et al. 1994; Cloninger & Svrakic, 1997) developed this theory, and the instrument to measure its dimensions, integrating information from different kinds of studies and researches.
(family studies, developmental longitudinal studies, psychometric studies of personality etc.) critiquing theories of traits and Eysenek scales (Cloninger 1987) and showing how genetic and environmental influences do not influence behavior in the same way.

In this perspective personality is viewed as individual differences respect to the adaptive systems of receiving, processing and storing information and experiences among the temperamental and character dimensions. Temperamental dimension refers to automatic emotional responses to experiences and is heritable and stable throughout life while character dimension refer to individual differences in self-concepts about goals and values and is moderately influenced by learning (Kose 2003; Cloninger et al.1993). Briefly, the four temperaments and three characters can be described as follows.

Novelty Seeking (NS) is the tendency to respond actively to novel stimuli with an exploratory search for novelty and pleasure and low tolerance for frustration: high level of NS are linked with curiosity, enthusiasm and quick engagement with whatever is new and unfamiliar, but also with impulsivity, excessive anger and quick disengagement whenever their wishes are frustrated, which leads to inconsistencies in relationships and instability in efforts.

Harm Avoidance (HA), in contrast, is characterized by fear of the unknown and shyness with strangers, which leads to avoidance behavior especially in new situations: high level of HA are linked to caution, care and good planning skills, but also with shyness, careful, insecurity, passivity, pessimism and low energy.

Reward Dependence (RD) is the tendency to place great value on external approval subordinating the behavior to signals of reward: high level of Reward Dependence are linked to sensibility, sociability and empathy, but also dependence, suggestibility and sensitivity to offence.

Persistence (P) is perseverance despite frustration and fatigue based on resistance to extinction of intermittently reinforced behavior: high levels of Persistence are linked to stability, alacrity, industriousness, sense of duty and perfectionism but can become maladaptive when the contingencies change rapidly.

Self-directedness (SD), is the ability of an individual to control, regulate, and adapt his or her behavior to fit the situation in accord with individually chosen goals and values. High levels of SD are linked to maturity, efficiency, strength, self-sufficiency, responsibility and good self-esteem.
and self-reliance but sometimes also to tendency to rebellion and disrespect for authority.

Cooperation (C) is the capacity to understand and accept other people: high levels of C are linked to tolerance, sympathy, sociability and empathy. Self-transcendence (ST) refers generally to identification with everything conceived as essential and consequential parts of a unified whole. High levels of ST are linked to patience, unselfishness, spirituality and creativity, but also to naivety and naturalness.

Cloninger developed a new version of the TCI (Cloninger 1999), the Temperament and Character Inventory-Revised (TCI-R), which has a five-point Likert scale that enables a better evaluation of each dimension subgroup and provides subscales for Persistence, absent in the first version (Cloninger 2008). However there is a substantial equivalence between the two scale versions so studies with both forms of TCI can be confronted (Brandstrom et al. 2003).

TCI, in both versions, is actually the most shared and accurate instrument to identify the relationship between temperament and mental diseases and especially anxiety disorders: Cloninger, in fact, started right from the attempt to identify the differences between patients with somatization disorder and anxiety disorder (Cloninger 1986).

1.1 Personality traits and psychiatric disorders

There are several models who propose to explain the relationship between personality traits and major psychiatric disorders, such as anxiety disorders (Mochcovitch et al. 2013; Klein et al. 2011, Akiskal 1989). Briefly they can be summarized in three categories: 1) Personality and mental disorders have similar causal influences but do not have a causal influence one on the other: they are view as having common cause, as belonging to the same continuum or, at most, as being a precursor of each other. 2) Personality has causal effects on the onset or maintenance of psychiatric diseases. 3) Psychiatric disorders have a causal influence on personality. In this review study an evaluation of the relation between anxiety disorders and Cloninger's temperament and character dimensions is presented both for the general dimension of anxiety and for the singles disorders. Based on these results the kind of relationship between anxiety disorders and personality traits is discussed.
2. METHOD

2.1 Selection of studies

A literature review of the three main psychological and medical database was conducted: PsycInfo, Medline and Web of knowledge. Key word searches using the following terms were employed: I “Temperament” and “anxiety disorders” II “character” and “anxiety disorders”; III “temperament and character inventory” and “anxiety disorders” IV “temperament and character inventory” and “panic disorder” or “agoraphobia” or “specific phobia” or “social anxiety disorder” or “generalized anxiety disorder” or “obsessive compulsive disorder” or “post traumatic stress disorder”. We found 458 articles related to the theme. Original interventional studies aiming to evaluate the relationship between temperament and character dimensions and anxiety symptoms or anxiety disorders (both in general and specific disorders) were included. Studies should use the TCI or TCI-R to measure temperament and character dimensions and had been published up until March 2013, while studies using the tridimensional Personality Questionnaire -the first version of the TCI, created before the integration of the fourth temperament dimension (persistence) - were excluded as well as genetic studies.

3. RESULTS

3.1.1 Temperament, character and anxiety

Many studies showed a correlation between the temperamental dimension of Harm Avoidance, and anxiety symptoms or disorders (Cloninger et al. 2012; Nyman et al. 2011; Jylhä & Isometsä 2006; Jiang et al. 2003; Ball et al. 2002; Sangorrin et al. 1998) with HA scores increasingly higher with increasing of the illness severity. Moreover since 1986 Cloninger (Cloninger 1986) linked HA to anxious traits, like frequent anticipatory worries and fatigability, that in fact subsequently have determined the four HA subscales: anticipatory worry and pessimism (HA1), fear of uncertainty (HA2); shyness with Strangers (HA3) and fatigability (HA4) are been all linked to anxious symptoms. Besides many studies (Cloninger et al. 2012;
Nyman et al. 2011; Jylhä & Isometsä 2006; Ball et al. 2002) showed how comorbidity with depression generally further elevates HA scores and its link with anxiety. Matsudaira & Kitamura (2006) using multiple regression analyses showed how HA not only is linked with anxious symptoms, but is often a good predictor of specific anxiety. However the same authors also underlines how also high novelty seeking can be a predictor of anxiety, especially if in presence of high HA and explain these results with the presence of aspects of neuroticism or traits of borderline temperament with the opposite tendency to approach / avoid the conflict. In this prospective anxiety can be associated both with inhibition of human behavior and with Impulsiveness. These data has been confirmed by a recent research (Lu et al. 2012) that showed how, although anxiety is linked to high HA scores, only high NS appears as a good predictor of anxiety. In effect according to the original thinking of Cloninger individuals with high novelty seeking can show anxiety characterized by global uneasiness or alarm without specific premonitory cues, frequent bodily pains and slow fatigability (Cloninger 1986). According to this data HA and NS would then be connected to two different forms of anxiety. However both studies were conducted among Japanese university students and don’t correlate with studies conducted in Europe on subjects suffering of anxiety disorders (Samochowiec et al. 2005; Brown et al. 1992) that usually showed a significant increase of high order dimension of all harm avoidance subscales and no change or even a decrease of NS, especially of NS1 (Exploratory Excitability). This last dimension is usually linked to slow fatigability while anxiety and fatigue seem to be closely related to each other and to HA (Jiang et al. 2003). As for reward dependence most studies showed no significance correlation with anxiety, while others (Lu et al. 2012; Tanakawa et al. 1997) found an inverse link between them that would be explained by the assumption that people who are low in RD are practical and cold and can be withdrawn and detached. Persistence appears as the temperamental trait more controversial: different studies showed different results with persistence alternately showing positive (Matsudaira & Kitamura, 2006), negative (Lu et al. 2012; Samochowiec et al. 2005) or none relationship (Jylhä & Isometsä 2006; Tanaka et al. 1998) with anxiety symptoms. Recently Cloninger (Cloninger et al. 2012) suggests that actually persistence can be the key to distinguishes people with anxiety disorders from those with mood disorders. This strong discriminant effect is the result of high TCI Persistence increasing both
negative emotions and positive emotions in the same person. In other words, high Persistence protects against mood disorders by increasing some positive emotions (such as people feeling happy, interested, strong, enthusiastic, inspired, attentive, and active) but, at the same time and in the same person, it increases the risk of anxiety disorders by increasing also negative emotions (such as people feeling distressed, scared, upset, guilty, ashamed, nervous, and jittery).

Besides temperamental traits also character’s elements seems to be linked to anxiety and even predictors of anxiety disorders: all researches agreed that Self-Directedness is inversely related to anxiety (Lu et al. 2012; Cloninger et al. 2012; Matsudaira & Kitamura 2006; Jiang et al. 2003; Tanaka et al. 1998). People who are low in SD, in fact, feel that their attitudes, behavior, and choices are determined by influences outside their control or against their will and so can be anxious about each event, seen as beyond their control. Similarly to what has been detected for HA, comorbidity with depression generally further elevates the negative relationship between anxiety and SD (Cloninger et al. 2012; Ball et al. 2002).

Besides some studies showed, at a minor degree, that also cooperativeness can be negatively linked to anxiety (Lu et al. 2012; Tanaka et al. 1998), while self transcendence sometimes showed a positive correlation with self transcendence (Matsudaira & Kitamura 2006): this data, however, didn’t appear clear and univocal.

3.1.2 Sex differences

There are important sex differences among both temperamental and character dimensions, but their influence on anxiety isn’t actually clear and defined. As for the temperamental dimension all studies (Cloninger et al. 2012; Al-Halabi et al. 2011; Miettunen et al. 2007; Gutierrez-Zotes et al. 2004; Mendlowicz et al. 2000; Cloninger et al. 1993) agreed that women scores show higher Harm avoidance and Reward Dependence, while Novelty seeking and Persistence are usually equal or inferior in comparison to men. Since HA dimension is linked with anxiety (1.1) can be inferred that this temperamental trait makes women on average more anxious than men, and in effect data show a greater prevalence of anxiety disorders among women (Mclean et al. 2011; Bekker et al. 2007; Kessler et al 1994). Nevertheless the picture is complicated by others temperament dimensions
and, often, by comorbidity with depression. As for the character dimension same studies showed higher levels of Cooperativeness and, sometimes, of self-transcendence among women, but these traits show only a limited relationship with anxiety (1.1).

3.2 Specific anxiety disorders

3.2.1 Panic disorder

Panic disorder is defined by unexpected panic attacks, anticipatory anxiety, and fear and avoidance of situations where escape might be difficult in the event of a panic attack: it’s a common disorder with a lifetime prevalence of approximately 3-4% (American Psychiatric Association, 2000). Many studies showed a relationship between panic disorder and high levels of harm avoidance (Wachleski et al. 2008, Koh et al. 2004). Furthermore, harm avoidance seems to predict also the severity of panic disorder (Marchesi et al. 2008; Koh et al. 2004) with levels higher in most serious panic disorders forms. The others temperamental traits showed contradictory results. Some studies showed high levels of Reward Dependence and low levels of novelty seeking (Koh et al. 2004) while many others didn’t show any significant relationship with these traits. The “Extravagance” aspect of Novelty seeking has been linked with initial insomnia in panic disorders, a symptom with affect more than 80% of PD disorders and that often exacerbate panic symptoms (Na et al. 2011). Besides high HA also low self-directedness has been strictly linked to panic disorder (Wachleski et al. 2008) and, at minor degree, low levels of persistence and cooperativeness (Marchesi et al. 2008). According to Marchesi et al. (2008; 2006) high levels of HA characterized all panic disorders, even if with a significant elevation in most serious forms, but are the low levels of Self-directedness, Persistence and Cooperation have a fundamental role among more insidious and drug-resistant panic disorders. Self-transcendence, instead, appears important in increasing the likelihood of experiencing depersonalization symptoms or depersonalization disorder in panic patients, which often affect the severity of panic disorders (Mendoza et al. 2011). Besides high levels of the “social acceptance” aspect of cooperation were observed in comorbidity between unipolar depression and panic disorders (Mula et al. 2008).
Therefore peculiar temperament profiles with high levels of HA and low levels of SD, P and C, can be considered a developmental risk factors for PD in adult age. HA, in particular, seems to be a consistent finding across current literature among panic, and more in general, anxious disorders independently of their cultural context. Familiar and genetic factors seems to influence both temperamental profiles and panic disorders, but actually has not been found any association between family history of PD and peculiar temperament-character profiles in offspring of patients with PD (Perna et al. 2012), suggesting that these factors may not be early expressions of familial vulnerability to PD.

3.2.2 Social anxiety and phobic disorders

The majority of studies that have dealt with the relationship between phobic disorders and temperament have focused on social anxiety (social phobia). Social anxiety disorder (SAD) is characterized by fears that a person will become embarrassed or humiliated in situations where he/she is exposed to perceived public scrutiny in social or performance situations: it’s a very common anxiety disorder with current prevalence estimates in the range from 4% to 6% and a lifetime risk from 7% to 13% (Wittchen & Fehm 2001).

All studies showed high levels of harm avoidance (Faytout et al. 2007; Mörtberg et. al 2007; Pallanti 2007; Lochner et al. 2007; Marteinsdottir et al. 2003; Pélassolo et al. 2002; Chatterjee et al. 1997) with particular reference to Shyness vs Strangers (HA3) factor, which is linked to avoid strangers and being unassertive and shy in most social situations. This factor is also linked to avoidant personality disorder which is often linked to social phobia and appears to be related to its clinical gravity (Savoia et al. 2010). Longitudinal studies (Faytout et al. 2007) showed also how HA remains a good predictor of anxiety over time.

As for the others temperamental traits most studies showed low levels of Novelty seeking (Pallanti 2007; Lochner et al. 2007; Marteinsdottir et al. 2003; Chatterjee et al. 1997) while reward dependence and persistence didn’t show any significant correlation.

As for the character dimension most studies showed low levels of self directedness (Mörtberg et al 2007; Lochner et al. 2007; Marteinsdottir et al. 2003; Pélassolo et al. 2002; Chatterjee et al. 1997) and, at minor degree, also of cooperativeness and self trascendence. Self directedness traits seems to be linked to more drug resistant forms of social phobia: while treatments
overall were associated with decrease in HA, increase in SD was observed after psychotherapy only (Mörtberg et al. 2007).

There are actually few studies about correlation between Cloninger’s personality traits and the other phobic disorders. Most researches about agoraphobia are in comorbidity with panic disorders and so the results are connectable to this category (3.2.1). Studies on specific phobia only showed a link with high levels of Harm avoidance (Cho et al. 2009) with particular reference to “fear of uncertainly” factor (HA2) linked to difficulty of tolerate uncertainty or unfamiliar circumstances that are potentially dangerous.

3.2.3 Obsessive compulsive disorder

Obsessive-compulsive disorder is characterized by recurrent obsessions and/or compulsions that may manifest in a variety of ways. Patients recognize that the obsessional thoughts, impulses, or images are a product of his or her own mind and are aware that are excessive or unreasonable, but they find themselves unable to stop or resist them: it is a relatively common disorder, with a lifetime prevalence of from 2 to 3% (American psychiatric association, 2000).

All studies showed a link between obsessive compulsive disorders and high levels of Harm avoidance (Kim et al. 2009; Alonso et al. 2008; Cruz-Fuentes et al. 2004; Lyoo et al. 2003; Lyoo et al. 2001; Kusunoki et al. 2000; Bejerot et al. 1998, Cloninger et al. 1993) and some of them also low levels of Novelty seeking (Alonso et al. 2008; Lyoo et al. 2001, Kusunoki et al. 2000), while only few researches show a correlation with high persistence and low reward dependence (Kim et al. 2009). According to Alonso et al. (2008) these temperamental traits (high HA and low NS) can be linked to certain belief that assume great importance in Obsessive Compulsive disorders as an exaggerated sense of responsibility and the overestimation of threat: distorted appraisals of the power of one's actions to produce or prevent harm combined with an unusually high estimation of risk would explain why most OCD sufferers seem to view situations as dangerous unless proven safe and become highly vigilant when novel circumstances arise.

However the most important data are linked come from the character dimension rather than the temperamental one: all researches showed a correlation between OCD and low levels of SD (Cho et al. 2009; Kim et al. 2009; Alonso et al. 2008; Cruz-Fuentes et al. 2004; Lyoo et al. 2003; Lyoo et
al. 2001, Kusunoki et al. 2000; Bejerot et al. 1998) which appears to be the most important predictor of OCD severity. Many of these studies showed a highly significant link between seriousness of obsessive compulsive symptoms, measured with Yale-Brown Obsessive compulsive Scale, and low levels of SD. Especially SD seems to have a more important effect on severity of obsessions than compulsions (Cruz-Fuentes et al. 2004; Lyoo et al. 2001). In this perspective low self-directedness has related to a reduced ability of OCD patients to regulate their own thoughts and, at a lesser degree, behaviors, particularly when they seek to guide them towards concrete goals, due to the presence of invasive obsessions and compulsions. Besides SD also low levels of C showed a significant, although less evident, relationship with OCD (Kim et al. 2009; Alonso et al 2008; Cruz-Fuentes et al. 2000; Kusunoki et al. 2000; Bejerot et al. 1998). Cloninger (1993) hypothesized that low levels of self-directedness and cooperativeness could reflect the high frequency of comorbid personality disorders observed in OCD patients: the presence of pervasive intrusive thoughts since childhood or adolescence along with accompanying feelings of isolation, guilt and blame, typical of OCD sufferers, might render difficult to develop the ability of identification as an autonomous individual (self-directedness) and as an integral part of human society (cooperativeness).

3.2.4 Post traumatic stress disorder

Posttraumatic stress disorder can develop after exposure to a traumatic event which provoked fear, helplessness, or horror in response to the threat of injury or death: the disorder cause anxiety, continuous reexperiencing of the event and avoidance of reminders of the event. (American psychiatric association, 2000). The studies which correlate post traumatic stress disorder with temperament and character showed different and interesting results. As for the temperament dimension many researches showed, as usual, a correlation between high levels of harm avoidance and PSD (North et al. 2012; Evren et al. 2010; Yoon et al. 2009; Ruchkin et al. 1998) but often this data are linked with an uncommon high level of novelty seeking, usually opposed to HA. Some studies (Ruchkin et al. 1998) also show a high level of reward dependence. It’s possible that the differences among studies are due to the fact that different temperament traits can expose to different traumatic events and, on the other side, that different traumatic events can correlate in different ways and have different consequences on different
temperamental traits: more researches will be necessary to verify this hypothesis. 
As for the character dimension many researches (North et al. 2012; Evren et al. 2010; Yoon et al 2009) showed a link between PSD and low levels of self-directedness and cooperativeness but, above all, with high levels of self-transcendence which appears as a typical character trait of PSD. This data can be explained by the link between PSD and dissociative experiences: low self-directedness and, above all, high self-transcendence scores, with particular reference to Creative Self-Forgetfulness (ST1), were significant predictors of dissociation in response to traumatic experiences (Grabe et al. 1999). Persons with high ST1 tend to forget where they are for a while, to lose awareness of the passage of time and, sometimes, to transcend their self-boundaries: often they appear “in another world” or “absent minded” with an absorption characteristic of “flow states”, “peak experiences” or high levels of meditation. Both patterns of temperament and character of patients with PTSD are specifically associated with the PTSD symptom severity: the more grows scores on subscales of harm avoidance and self-transcendence and decrease scores on self-directedness and cooperativeness much more grow the seriousness of PTSD symptoms (Yoon et al 2009).

3.2.5 Generalized anxiety disorder
Generalized anxiety disorder (GAD) is one of the most frequent anxiety disorders (life prevalence up to 5%) and is a highly impairing condition often comorbid with other mental disorders (Lieb et al. 2005; Fricchione 2004). Its characteristics (apprehensive expectation, excessive and generic anxiety and worries that the subject isn’t able to control) are similar to the descriptions of harm avoidance traits and so it is no wonder that there is a correlation even more strict of the other anxiety disorders among GAD and high level of HA, and especially “anticipatory worry” (HA1) and “fear of uncertainty” (HA2) factors, as confirmed by all studies (Pierò 2010; Rettew et al. 2006; Gothelf et al. 2004; Cloninger 2000; Allgulander et al 1997; Cowley et al. 1993). In fact high HA1 indicate the tendency to have pessimistic worriers also about normal situations and HA2 the tendency to be anxious even when there is little to worry about and not to tolerate uncertainty or unfamiliar circumstances. Moreover associations between temperament and GAD appear to be present even when overlapping items are removed (Lemery et al. 2002).
HA scores appears to be highly predictive of GAD diagnoses both among children and adults but, despite of this, high levels of HA are neither
necessary nor sufficient in the formation of GAD anxiety symptoms (Rettew et al. 2006). High levels of HA, in fact, are frequently not associated with GAD especially among individuals that have more developed coping or emotion regulation skills that prevent temperamental predispositions from becoming clinically impairing. Furthermore, even if GAD is over-represented in individuals with high HA, could often be seen also in individuals with moderate levels of HA and rarely even in people with low HA especially among individuals with poor emotional regulation skills. The others temperamental traits didn’t show any significant correlation, even if some studies underlined the presence of variable NS levels among GAD subjects: this trait has been linked to impulsiveness, especially if correlated to lower SD and RD (Pierò 2010).

As for the character traits low levels of self-directedness sometimes showed a significant link with GAD (Ball et al. 2002; Cloninger et al. 2000) and this relationship is confirmed by longitudinal studies which showed how pharmacologic treatment of GAD cause a marked increase in Self-Directedness in addition to marked reduction in Harm Avoidance (Allgulander et al. 1997).

4. DISCUSSION

The dimensional approach of the psychobiological personality model of temperament and character was used by several research groups to study personality traits in anxiety disorders: these studies show a high degree of overlapping and mutual integration. All studies agreed about two fundamental point: the high direct correlation between the temperamental dimension of Harm Avoidance and anxiety symptoms and the high inverse correlation between the character dimension of Self-Directedness and anxiety symptoms, with HA scores increasingly higher and SD increasingly lower with increasing of the illness severity.

Important and original data come from comparing studies which examined the relationship between personality traits and specific anxiety disorders. Although if all anxiety disorders showed high HA levels, the specific subscales of this temperamental dimension assumed different importance among different disorders. In the same way the character dimension of Self-Directedness and its subscales can assume different meaning, bearing precious information not only about the specific difficulty linked to a determined disorder but also about probability of comorbidity with other
anxiety and psychiatric disorders, the drug resistance or the more convenient therapy.
Besides the others temperamental and character traits, which generally didn’t show significant relationship with anxiety symptoms, can assume an important weight on specific anxiety disorders as summarized in table 1.

Table 1 significant correlation between specific anxiety disorders and personality traits.

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<thead>
<tr>
<th>Anxiety disorders</th>
<th>Panic disorder</th>
<th>OCD</th>
<th>Social anxiety</th>
<th>Specific phobia</th>
<th>PTSD</th>
<th>GAD</th>
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<tr>
<td>Significant TCI dimension relationship (in order of significance)</td>
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Despite the researches showed these significant relationships between the personality (in its temperamental and character traits ) specific anxiety disorders and, more generally, anxiety symptoms and, at the same time, many of such researches hypnotized a genetic component both of temperamental traits and anxiety disorders, none of them have hazardized a guess of a direct and causal influence of temperamental traits on anxiety disorders or vice versa.
So among the three categories in which we summarized the models of relationship between personality and anxiety disorders (1.1) the first model, which postulate similar but independent causal influences, appears the most indicated. According to this model personality traits and anxiety disorders are not directly related but there is an overlap and a fundamental continuity between them. At the same time there is something more specific than sharing the same spectrum or depending on a third factor that affects both: longitudinal researches underlined how personality traits can be possible
predictors of anxiety symptoms and disorders. This was highlighted both for temperamental dimension and, even if at minor degree, for character dimension of personality. In this perspective personality and anxiety disorders have a similar etiology, due both to genetic and ambient factors: that is these aspects affect the personological area and the psychopathological one substantially independently but with significant correlations that allow a prevision. In other words this precursor model views personality as an early manifestation of anxiety disorder: longitudinal studies, in fact, showed how individuals with high or low levels of some personality trait are at increased risk for developing anxiety disorders and anxiety symptoms over time.

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