ORIGINAL ARTICLES

ATTRIBUTIONAL STYLE AND REACTION TO FRUSTRATION IN DELUSIONAL DISORDERS

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ABSTRACT

Background: The attribution style and the reactions to frustration play an important role both in depression and paranoia. These aspects are characteristic elements of social cognition. The latest studies done in this area (there are studies only related to attribution) proved significant deficiencies to the attribution style, that later reflect in the mechanism of production and manifestation of delusional symptomatology and also in the social functionality of the delusional. The objective of this paper is to study the attribution style and the reactions to frustration in the persistent delusional patients with and without an associated depression, in order to better understand their social cognition. Material and methods: Forty patients diagnosed with ICD 10 delusional disorder with a period of evolution of 8 years, were grouped into 2 subgroups: a) patients with depression and b) patients without depression. They are all part of the Case Register of Timisoara Psychiatric Clinic (CRPTC), which monitors the functional psychoses since 1985. ASQ (Attribution Style Questionnaire) and Rosenzweig frustration test was applied for each patient in the period of remission BPRS (Brief Psychiatric Rating Scale). Results: Depressive delusional patients make stable attributions for both type of events, but for the negative ones, the attribution is predominant extern, and for the positive events the attribution is external. Common delusional patients make external and particular attributions for negative life events, while for the positive events the attributions are internal and stable. Concerning the response to frustrating situations, persistent delusional psychosis patients with depression give answers which are prevailing extra punitive, whereas those without depression give prevailing need-persistence answers. There are significant similarities between the two groups concerning the type of persisting necessity. Conclusions: Among the persistent delusional psychosis patients, those with depressive features demonstrate an aggression directed mostly towards the exterior in frustrating situations, while associating less the negative events to their own personality, compared to the pure persistent delusional patients.

Key Words: attribution, reaction to frustration, delusional, depression

INTRODUCTION

In the last 20 years, there has been an increasing interest for the way attributions are made for the paranoid and depressive delusional patients.

Heider, the founder of the attribution theory, is trying to explain attribution as “the process through which a person intuits reality, can predict it and master it”.(1958)1,2

Through almost everything people do on an everyday basis, they are actually trying to explain all life
events they are a part of, if they are either the authors or the observers through the process. Usually, people make attributions very often at a rate of one at every few hundred spoken words (Zullow et al. 1988).4

The central idea of attribution is that events and behaviors result from or are due to certain forces and determiners which come from the person involved or from the environment around this person. This internal/external dimension is the first and the main dimension of attribution. Later, there are other dimensions that come up: stable/unstable (a case in which the cause was analyzed from the point of view of stability over time) and global/particular (the cause is something that either affects all areas of functionality or only this specific situation). Initially, the attribution process in psychopathology was followed regarding depression. Abramson claimed that people who are vulnerable to depression have a depressing attribution style, which involves attributing negative events to some internal, global and steady causes (the pessimistic attribution style).5 A meta-analysis of 106 studies, published by Sweeney in 1986 found strong evidence that the pessimistic attribution style is predictable for depression. More recently, the Temple – Wisconsin Cognitive Vulnerability to Depression (1999) proved that the apparently healthy students, who had a pessimistic attribution style and a dysfunctional attitude towards their own self, presented a higher risk of being prone to depression in more than two years (17% for major depression and 39% for minor symptoms of depression), when compared to students who did not have these characteristics (1% major depression, respectively 6%).5,6,7

Later, the attribution theory was applied within the paranoid phenomenon. Rosenbaum and Hadari (1985) found that paranoid patients showed an excessive tendency of attributing their experiences to other people’s actions. These observations have been later continued by Kaney, Bentall (1989) and Lasar (1997).

This way, in an initial study (Kaney and Bentall, 1989), it was noticed that paranoid subjects make an excessive steady and global attribution for negative events, similarly to the depressed subjects and, in contrast with the latter, make an excessive external attribution to negative events and an excessive internal attribution to positive events.5,8-11

Through the studies of the 1990’s, Candido and Romney observed that paranoid individuals attributed good events to themselves and bad events to others or to chance, depressed individuals attributed bad events to themselves and good events to others or to chance, while patients who were both paranoid and depressed fell in between the two groups mentioned above with respect to their attributions of good events, but did not differ from the paranoid group in their attribution of bad events.12

The issue of the type of attribution for the paranoid and the depressive patients still continues to interest the scientific community, so we have all the proof provided by the studies made by Kinderman et al. (1992), Fear et al. (1996), Martin and Penn (2001, 2002), Craig et al. (2004), Jolley et al (2006), Melo (2006), Merin et al. (2007), etc.3,13-15

However, not all the studies supported the attribution style above mentioned by Kaney and Bentall, due to the types of groups and the scales used, as well as the fact that paranoia (persistent delusional psychosis) must be viewed as a dynamic process over time.9 Regarding the latter, we need to mention the two kinds of paranoia described by Trower and Chadwick, the “poor me” and the “bad me” paranoia, which can represent different phases within a persistent delusional psychosis in a patient.16

In contrast with attribution, which is a current subject, the type of reaction to frustration, studied by Rosenzweig, represents a subject that is nowadays almost abandoned in specialized writings. The theoretical foundation of this frustration test done by Rosenzweig can be found in the general theory of frustration, developed in 1934.

Rosenzweig (1978) posits that the construct of aggression can be classified under two headings: the direction of aggression and the type of aggression. Included under the direction of aggression are the extra punitive ones, in which aggression is turned onto the environment (turned out); intra punitive, in which it is directed at oneself (turned in); and impulsive, in which aggression is evaded in an effort to gloss over the frustration (turned off). The type of aggression includes: obstacle dominance, in which the source of the frustration stands out in the response, ego-defense, in which the subject defends her/his own integrity and need-persistence, in which the solution of the frustration problem is emphasized by pursuing the goal despite the obstacle.17,18

Rosenzweig stated that the answers observed outside of punishment are more frequently seen in paranoia, the ones within the punishment are seen in psychasthenic or obsessive neurosis and the ones without punishment are seen among some hysterical manifestations.

The purpose of the writing was to study the attribution style and the way of reaction towards frustration among subjects with persistent and paranoid delusion, who may or may not also be depressive to some extent, subjects who are placed according to the ICD-10 (The International Classification of Diseases) in the diagnosis category of delusional disorder.19
METHODOLOGY

A group of 40 delusional paranoid subjects has been selected out of the Case Register from the Psychiatric Clinic in Timisoara. This register is a document where all new cases of endogenous psychosis were recorded between 1985 and 2006, which were afterwards prospectively followed from a demographical, social and its clinical evolution point of view, by a specialized and supervised team. The project’s initiator, the supervising and administrative team remained unaltered since 1985 to date. This group was divided in two smaller groups of 20 subjects each, as follows:

- Group A – there are 20 cases (13 women and 7 men) of paranoid delusional subjects with depressive signs throughout their evolution, who did not reach the intensity of a depressive episode (cases coded ICD 10 F22.0 or F 22.8 – persistent delusional disorder or other persistent disorders).
- Group B – there are 20 cases (12 women and 8 men) of paranoid delusional subjects that showed no depression throughout their evolution (cases currently coded ICD 10 F22.0 as persistent delusional disorder).

The subjects from the two groups had the following characteristics:

- The psychotic disorders above mentioned had their onset in 2000, 2001 or 2002.
- The age at onset was between 18 and 65 years of age.
- The present clinical diagnostic according to the ICD 10 is Persistent Delusional Disorder, F22.0 or Other Persistent Delusional Disorders.
- They are actively followed in the Mental Health Center in Timisoara and the ambulatory psychiatric practices in the city.
- There is a voluntary participation without any kind of financial motivation on part of the researchers.

Subjects with a history of abusive consumption of any kind and those with drug or alcohol addiction have been excluded.

The PSE-10 SCAN has been used as a semiological manual. All cases have been actively followed through time from a demographic, social and clinical evolution point of view.

The following have been used as assessment tools:

Brief Psychiatric Rating Scale (BPRS – a scale with 16 elements; Lukoff, Nuechterlein & Ventura, 1986). It is a semi-structured interview which evaluates the severity of psychiatric symptoms and each element was assessed on a scale from 0 to 6, according to their severity (0= absent, 6= extremely severe).

The Psychiatric Congress in Bucharest in 2008, but it was not sent for publishing in a specialized journal.

For this paper, we have chosen cases with predominantly persistent delusional symptoms over the depressive ones, which we have studied in another paper, where we observed that the persistent depressive symptomatology determined a similar attribution style to the depressive one, but unlike the delusional paranoid (the paper has been presented at the National Psychiatric Congress in Bucharest in 2008, but was not sent for publishing in a specialized journal).

In this paper, we expect the group of patients with mixed symptomatology and those with paranoid delusional psychoses to achieve external attributions in a smaller degree than the usual delusional. Regarding reaction to frustration, we expect it to be extra-punitive, perhaps intra-punitive with dominance or ego-defense obstacles. We need to mention the fact that the study of reaction to frustration with this symptomatology represents a pioneer attempt.

As assessment scales for the representation of attribution type of the subjects with depression and paranoid delusion. The two types of symptomatology are the only ones we have a consensus upon, regarding the attribution type. The method of attribution among the subjects with mixed symptomatology (depressive and paranoid delusional) has not been widely studied, so there are few studies in this area (for example the one above mentioned by Candido and Romney). However, even in the mixed symptomatology cases we have the issue of the persistent delusional for the psychotic disorder and we expect to find attribution differences according to this.
the current symptomatic profile of subjects included in this study we used the BPRS scale, often used for this purpose in current studies, the ASQ scale for attribution style assessment and for assessing the reaction type to frustration, we used the Rosenzweig Picture-Frustration Study, because we consider it to be the most complete scale in this aspect out of the small number of scales used in this area.

The assessment of the subjects has been done throughout their remission time and at a cathamnesis period of eight years. Data has been collected for the remission time of the subjects, because we considered that the attribution type and the type of reaction to frustration are cognition aspects which are fundamental for the symptomatic psychosis discussed here, as they are seen as possible factors for the appearance of acute symptomatology in this disorder.

All participants volunteered to collaborate in the study. The order of administration of the assessment protocol was the same for all participants: evaluation of socio-demographic data, BPRS, ASQ and PFS.

RESULTS

The average age at onset within the two groups is very close, 44 years old in Group A and 43.8 in Group B. The averages of the elements on the BPRS scale in the two groups are presented in Table 1.

<table>
<thead>
<tr>
<th>Item</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.  Somatic concern</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>2.  Anxiety</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3.  Emotional withdrawal</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>4.  Conceptual Disorganization</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>5.  Guilt feelings</td>
<td>1.6</td>
<td>0.6</td>
</tr>
<tr>
<td>6.  Tension</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>7.  Mannerisms and posturing</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>8.  Grandiosity</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>9.  Depressive mood</td>
<td>2.3</td>
<td>0.2</td>
</tr>
<tr>
<td>10.  Hostility</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>11.  Suspiciousness</td>
<td>2.1</td>
<td>1.1</td>
</tr>
<tr>
<td>12.  Delusional behavior</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>13.  Motor retardation</td>
<td>1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>14.  Uncooperativeness</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>15.  Unusual content of thinking</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>16.  Blunted affect</td>
<td>0.85</td>
<td>0.4</td>
</tr>
</tbody>
</table>

We need to add the fact that the highest scores were registered for the pressure item, where 4 was the highest (moderate to severe), whereas for the rest of the items the highest score was 3 (moderate).

Items 9 and 11 are remarkable. For the first one we have an intensity average of easy to moderate depression disposition for the group with depression symptoms noticed throughout the evolution of the disorder (perhaps this could have been expected for this group), but it is surprising that leeriness of this manifestation is higher for the group with mixed symptoms.

Regarding attributions, Table 2 will reveal the fact that there are no significant differences regarding external attribution of the negative events among the two groups, but regarding internal attribution of positive events, this is a little more pronounced in the group of delusional patients without depression compared to the delusional patients with depression.

Table 2. Performed attributions for positive and negative events.

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal negative</td>
<td>3.63</td>
<td>3.16</td>
</tr>
<tr>
<td>2. Internal positive</td>
<td>5.49</td>
<td>5.83</td>
</tr>
<tr>
<td>3. Stable negative</td>
<td>5.16</td>
<td>4.49</td>
</tr>
<tr>
<td>4. Stable positive</td>
<td>5.14</td>
<td>5.16</td>
</tr>
<tr>
<td>5. Global negative</td>
<td>4.53</td>
<td>3.68</td>
</tr>
<tr>
<td>6. Global positive</td>
<td>4.44</td>
<td>4.53</td>
</tr>
</tbody>
</table>

Both groups of delusional patients make steady attributions for positive events and we can say the same for negative events, but with a slight difference regarding depressive delusional patients, with a more stable attribution. However, the average of items does not reveal a high degree of stability.

Related to global events, the results are not relevant, except for the causes of the negative events among the simply delusional group, which are seen as affecting less the other areas of life.

Regarding the answers to frustrating situations, there are differences between the two groups, as follows: the delusional subjects with depression give extra punitive answers (the aggression is guided towards the exterior), whereas the delusional subjects without depression give answers without punishment (as the aggression is avoided and the frustrating situation is described as being unimportant or not being anyone’s fault). There are significant similarities.
between the two groups regarding the type of necessity persistence, because both groups give significant answers in wanting to find a solution for the problem. There are no significant differences between the two groups regarding the type of predominant obstacle or predominant self.

**Table 3. The results of Rosenzweig Picture-Frustration Study**

<table>
<thead>
<tr>
<th>The type of answer in frustrating situations</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra punitive answer</td>
<td>64</td>
<td>44</td>
</tr>
<tr>
<td>Intra punitive answer</td>
<td>51</td>
<td>36</td>
</tr>
<tr>
<td>Answer without punishment</td>
<td>44</td>
<td>49</td>
</tr>
<tr>
<td>The type of predominant obstacle</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>The type of predominant self</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>The type of necessity persistence</td>
<td>91</td>
<td>59</td>
</tr>
</tbody>
</table>

**CONCLUSIONS**

The average age at onset between the two groups is extremely close and the depressive side seems to have an insignificant effect upon this aspect.

Both groups attribute external cause in negative events.

In frustrating situations, patients with delusional depression give extra-punitive responses (the aggression is guided towards the exterior) contrasting usual delusional patients who respond without punishment (as the aggression is avoided and the frustrating situation is described as being unimportant or not being anyone’s fault).

These are the aspects that currently represent the most relevant differences between the two groups, regarding all the studied aspects.

Concerning the steadiness of event causes, we could conclude that the influence of depression on the persistent delusional patients determines them to make steady attributes for the negative events, as was observed in the non-psychotic depressed patients in the existing studies on this subject.

What we can observe is that the subjects of the two groups, when found in frustrating situations, have the tendency of finding solutions for the problems that the frustrating situations create, either through asking for help from a third party or through self-obliging in finding the best solution for the issue at hand.

This evaluation was limited by the small size of the two groups and the lack of a control group.

**DISCUSSIONS**

The study of attribution style and reaction to frustration illuminates the manner in which these persons attend and interpret their place in the social world. If the attribution style stays as a central concept in the cognitive model of paranoid psychopathology, the reaction towards frustrating situations will stay a concept that is as little used in current research, as it is associated with the study of the paranoid phenomenon. The application of the Rosenzweig Picture-Frustration Study Test is currently used especially in forensic psychiatry, child psychiatry and in developing other tests regarding aggression testing (i.e. PFS – AV, adapted version of Rosenzweig Picture-Frustration Study).

The results on attribution until now, through the different studies regarding the paranoid phenomenon and the depressive paranoid dysfunction, did not find a complete answer and the explanation could be the different types of paranoia. Trower and Chadwick (1995) have suggested that there are at least two different kinds of paranoia: “poor me” paranoia in which persecution is believed to be undeserved and in which self-esteem is relatively high and “bad me” paranoia in which persecution is believed to be deserved, associated with depression and in which self-esteem is relatively low. Bentall and Kinderman suggest that the distinction between “poor me” and “bad me” is not simply related to category, but that there is a complex dynamic process that may underlie this phenomenon. This is one of the aspects also supported by other researchers like Sigmaringa Melo Sara or Taylor Jayne L.

The two groups of patients studied in this paper could raise the issue of identifying with the “bad me” paranoia for Group A and “poor me” paranoia for Group B, due to the presence of depression in Group B, however more details are needed regarding the way paranoia is perceived (deserved or undeserved).

Regarding attribution, there is a similar study, done on groups of patients assessed on scales and conducted by Candido and Romey (1990), in which they compared attribution between participants experiencing persecutory delusions who were not also depressed, participants experiencing a depressed mood who were not also experiencing persecutory delusions and participants experiencing both persecutory delusions and a depressed mood. There are participants who were both paranoid and depressed and who did not differ from the paranoid group in their attribution of bad events, but that for the good events attributed less to themselves. Later, in Melo’s study (2006), in
which the attribution style was researched on the same scale (ASQ) for the participants with diagnoses of delusional disorder, schizophrenia or schizoaffective disorder, a greater externalizing attribution bias was observed for negative events in “poor me” paranoia, where individuals believe they are undeserving victims of persecution, rather than in “bad me” paranoia. This aspect is also supported by Fornells-Ambrojo and Garety after performing a study on an early psychosis sample.

For our study, if we keep the above mentioned correlation of Group A with “bad me” paranoia and Group B with “poor me” paranoia, with the mentioned limits and we relate to Melo’s study results presented above, we find similar results regarding external attributions of causes for negative events, but with no significant differences between the two groups, unlike Melo’s study.

In this study, associating the type of reaction in frustrating situations for delusional paranoid patients is an addition in trying to understand the relating pattern of the paranoid subject to the outside world. This association of approaches could be a starting point for other studies to follow in trying to understand the way the paranoid delusional relate socially.

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