External Shame as a Mediator between Paranoia and Social Safeness in Psychosis

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Abstract

Background: The overactivation of the threat-defence system combined with an underdeveloped affiliative system has been emphasised as important in psychosis, usually leading to negative affect and impaired social functioning. Difficulties in feeling safe and content in relationships with others, common in individuals with psychotic symptoms, have been linked to two specific outputs of the threat-defence system: Paranoid ideation and external shame. This study sought to explore the associations between paranoid ideation, external shame, and social safeness.

Methods: Participants diagnosed with psychotic disorders (N = 37) completed a series of self-report questionnaires.

Results: Results showed a significant negative association between social safeness and external shame and frequency of paranoid ideation, while external shame was positively associated with both frequency and distress of paranoid ideation. Results revealed that the relationship between frequency of paranoid ideation and social safeness was mediated by external shame.

Conclusions: These findings suggest that feelings of being inferior and subordinate in the eyes of others increases vulnerability to difficulties in social connectedness and safeness. Treatment for paranoid ideation could benefit from integrating strategies to help patients deal with shame.

Key Words: external shame, paranoid ideation, psychosis, social safeness, threat system

Key Points

1. External shame was associated with the frequency of paranoid ideation; and social safeness was negatively associated with current external shame and frequency of paranoid ideation.
2. This suggests that the impact of frequency of paranoia in social safeness is operated through external shame.
3. External shame could be considered as a therapeutic target in psychosocial interventions for psychosis in fostering social safeness.
Psychosis is a broad domain that includes several diagnoses defined by “abnormalities in one or more (...) delusions, hallucinations, disorganized thinking (speech), (...) motor behaviour, (...) and negative symptoms” (APA, 2013). Despite the traditional view of psychosis as severe, debilitating, chronic conditions usually with poor outcomes and high levels of dysfunction and suffering, psychosis is currently conceptualised as a phenomenon that can occur in different contexts leading to heterogeneous outcomes (Henry et al., 2010; Menezes, Arenovich, & Zipursky, 2006).

Paranoid ideation, a common symptom in psychosis (Sartorius et al., 1986), consists of a normative psychological process that can occur both in clinical and non-clinical populations (Ellet, Lopes, & Chadwick, 2003; Fenigstein & Vanable, 1992; Freeman et al., 2005; Garety, Everitt, & Hemsley, 1988). It has been described as a tendency to feel suspicious and resentful, holding unfounded beliefs that others have malevolent and harmful intents towards the self (Freeman & Garety, 2000). Paranoia varies along a continuum, ranging from subclinical social evaluative concerns and exaggerated self-referential bias to more pervasive clinical forms, such as paranoid delusions (Barreto-Carvalho, Pinto-Gouveia, Peixoto, & Motta, 2014; Barreto-Carvalho et al., 2015; Bebbington et al., 2013; Freeman et al., 2005; Verdoux & van Os, 2002). According to an evolutionary perspective (Ellet et al., 2003; Freeman et al., 2005; Gilbert, Boxall, Cheung, & Irons, 2005; Matos, Pinto-Gouveia, & Gilbert, 2013; Pinto-Gouveia, Matos, Castilho, & Xavier, 2014), paranoia is an adaptive response that allows for the early detection of social threats to the self from hostile and harmful others using a “better safe than sorry” rule (Gilbert, 1998; Gilbert et al., 2005). This is possible due to the existence of a particular state of mind, known as the “paranoid mind” (Gumley & Schwannauer, 2006) or “suspicious mind” (Freeman, 2007), that influences cognitive, affective, and behavioural responses to perceived interpersonal threats. Specifically, this “suspicious mind” translates into a set of cognitive—attentional, memory, reasoning/explanatory, and attributional—biases (e.g., Bentall, Corcoran, Howard, Blackwood, & Kinder- man, 2001; Berry, Bucci, Kinderman, Emsley, & Corcoran, 2015; Garety & Freeman, 2013) as well as emotional processes/states (e.g., Freeman & Garety, 2003; Garety & Freeman, 2013) and behavioural outputs (e.g., act upon the persecutory delusion or engage in avoidant and safety strategies). Together these outputs of the “suspicious mind” contribute significantly to the development and reinforcement of paranoid symptoms over time (Freeman, 2007), and may result in less social contacts and engagement with others (Freeman, Garety, Kuipers, Fowler, & Bebbington, 2002; Freeman et al., 2005; Gilbert, 2001). This process would tend to be circular and symptoms such as hypervigilance to social threats followed by avoidance behaviours would increase suspicion and paranoia symptoms, which in turn would increase the perception of social threat (Green & Phillips, 2004).
The Affect Regulation Systems and Its Links to Paranoia, Shame, and Social Safeness

The threat-defence system is responsible for monitoring and evaluating the environment, and for screening for situations of threat (either perceived or actual threat). Studies have found a biased threat appraisal in psychosis samples (e.g., Freeman & Garety, 2003) as well as poor mentalising skills with regard to threat both from the outside (e.g., behaviours of others) and the self (e.g., own emotions, thoughts) (Dimaggio & Lysaker, 2015). These and other factors might influence the emergence of paranoid ideation as a defensive strategy to deal with negative affect (such as shame, anxiety, depression) arising from psychological and interpersonal challenges.

Social threats seem to be particularly related to the experience of shame. Shame is one of the proposed self-conscious emotions (Tangney & Fischer, 1995), and it can be conceptualised and studied in terms of its components or mechanisms—e.g., shame as an emotion, as cognitions/beliefs about the self, as behaviours or actions, or as neurophysiological systems, among others (Gilbert, 1998; Tangney, 1996). Two types of shame have been proposed in the literature: internal and external shame. External shame would occur when people perceive themselves as existing negatively in the mind of others. On the other hand, internal shame is defined as a negative self-evaluation, focused on personal mistakes and perceived shortcomings (Gilbert, 1998). Therefore, shame would act as a warning sign for the risk of rejection, exclusion, or social devaluation (Gilbert, 2007). This type of shame would orientate behaviour towards safety strategies (e.g., appeasing) aiming at protecting the self from the negative evaluation of others.

Several studies have found associations between external shame and psychopathology (e.g., Matos & Pinto-Gouveia, 2010; Pinto-Gouveia & Matos, 2011) and specifically with paranoid symptoms (Gilbert et al., 2005; Matos et al., 2013; Mills, Gilbert, Bellew, McEwan, & Gale, 2007; Pinto-Gouveia et al., 2014). External shame would be strongly associated with paranoid symptoms considering the fact that those symptoms are focused on interpersonal threats caused by perceived malevolent and persecutory intentions of others towards the self (e.g., Freeman & Garety, 2004; Freeman et al., 2005). Individuals with higher levels of shame are likely to be more socially anxious, feeling less safe in relationships, and struggling in interpersonal relationships (Gilbert, 2010). In psychosis, external shame and stigma are highly prevalent and have been found to block affiliative connections to others, promote avoidance, and increase social anxiety (Birchwood et al., 2006). Allison, Harrop, and Ellet (2013) found that individuals with early psychosis perceived themselves as being of lower social rank and inferior to controls; also higher frequency of submissive behaviours and entrapment feelings were found. Subsequently, individuals with psychosis would be more sensitive to the power of others, especially the power to persecute, hurt, or reject them. Wood and Irons (2016) found associations between low social rank, levels of external shame, and depressive symptoms and reported personal recovery in a sample reporting psychotic experiences.
The soothing system is a key system for the regulation of the threat-defence system and a facilitator of affiliative and prosocial behaviours. This affect regulation system is sensitive to interpersonal cues of social safeness, belonging, acceptance, and being cared for. Social safeness refers to the experience of the social world as safe, warm, and soothing (Gilbert et al., 2009) and is linked to affection and kindness, both being soothing qualities (Gilbert, 2009). People who feel safe, content, and loved (the threat pathways are turned off) are able to explore the social environment, share, and care for others (Depue & Morrone-Strupinsky, 2005; Gilbert, 2005). Feelings of safeness and affiliation have critical effects on abilities to process social information and on affect regulation (Fonagy, Gergely, Jurist, & Target, 2002). Moreover, poor affiliative skills (in relation to others and in the self-to-self relationship) may increase distress, social avoidance, and risk of psychotic relapse (Gumley, Braehler, Laithwaite, MacBeth, & Gilbert, 2010). In fact, compassion-based interventions that aim at activating the soothing system have been showing promising results for psychosis (e.g., Braehler et al., 2013).

Although the relationship between external shame and paranoid ideation has received some attention, it is still unclear how such mechanisms contribute to the difficulties that individuals with psychosis tend to report in social connectedness. To our knowledge, studies linking paranoid ideation and external shame have mainly been conducted in non-clinical samples, with only a few addressing external shame in clinical samples (e.g., Michail & Birchwood, 2013; Turner, Bernard, Birchwood, Jackson, & Jones, 2013). Therefore, this study sought to explore the relationships between paranoid ideation, external shame, and social safeness in a group of patients with a diagnosis of a psychosis-spectrum disorder. We predicted paranoid ideation to be positively associated with external shame, and both variables to be inversely associated with social safeness. Additionally, we were also interested in exploring whether external shame mediates the impact of paranoid ideation on social safeness.

**Methods**

**Participants and Procedures**

The sample consisted of outpatients at the Psychiatry Department of the Coimbra Hospital and University Centre or at the Mental Health Community Team—Baixo Vouga Hospital Centre (Aveiro, Portugal). All of the participants had been diagnosed with a psychosis-spectrum disorder by their psychiatrist.

All procedures were approved by the ethics committee of both hospitals before the beginning of the study. Participants were recruited after referral from their psychiatrists. Each participant was given a brief description of the nature and objectives of the study and all questions were clarified. Confidentiality and anonymity were assured. Upon their agreement to participate, they would be asked to sign a consent form (based on the Declaration of Helsinki). Participants were then given
a battery of self-report questionnaires which took approximately 45–60 min to complete. One researcher with clinical expertise was present during the assessment and helped the participants whenever needed.

Measures
Paranoia Checklist (PC; Freeman et al., 2005; Motta, Barreto Carvalho, Pinto-Gouveia, & Peixoto, 2016) is composed of 18 items that provides a multi-dimensional assessment of paranoid ideation (frequency, conviction, and distress). Both the original and Portuguese versions of the scale have demonstrated an excellent internal reliability ($\alpha \geq .90$) for all subscales. In this study, the Cronbach’s alpha was .91 for the frequency subscale, .95 for the conviction subscale, and .94 for the distress subscale.

Other As Shamer Scale-2 (OAS2; Matos, Pinto-Gouveia, Gilbert, Duarte, & Figueiredo, 2015) is a short version of the original OAS (Allan, Gilbert, & Goss, 1994; Goss, Gilbert, & Allan, 1994), composed of eight items, rated in a 5-point Likert scale (from 0 = “never” to 4 = “almost always”), designed to assess external shame. Higher total scores indicate more feelings of external shame. The scale presents a strong association with the original version ($r = .91$) and good psychometric properties, with an internal consistency of $\alpha = .82$. In the present study the Cronbach’s alpha for total scale was .88.

Social Safeness and Pleasure Scale (SSPS; Gilbert et al., 2009; Dinis, Castilho, Xavier, & Pinto-Gouveia, 2014) is a scale that assesses the extent to which people experience pleasure, positive feelings, and emotions in social situations. It is composed of 11 items (from 1 = “almost never” to 5 = “almost all the time”). Higher total scores indicate more feelings of social safeness. The original scale demonstrated an excellent internal reliability ($\alpha = .91$) and the Portuguese version ($\alpha = .93$). In this study, the Cronbach’s alpha for total scale was .93.

Data Analysis
In order to explore the relationship between variables, two-tailed Pearson product–moment correlations were conducted. Additionally, and to further understand the contribution that frequency of paranoid ideation (PC) and current external shame (OAS) have on the individual’s experience of their social world as safe and soothing (SSPS), mediation analyses were conducted using PROCESS (Hayes, 2012). A bootstrapping procedure, using 5 000 resamples, was used to assess unconditional indirect effects.

Results
Descriptives
The sample comprised 37 participants (30 male). Sample information can be consulted in Table 1. In terms of psychiatric diagnosis, 89.19% had a schizophrenia diagnosis, 8.11% schizoaffective
disorder, 2.70% psychosis not otherwise specified. All participants were on antipsychotic medication. At the time of the study, 51.4% (n = 19) of the patients presented active paranoid ideation as measured by PC (scores one standard deviation above the mean). This goes in line with the rates found in previous studies (Sartorius et al., 1986). A table containing descriptive information about the study measures is presented (Table 2).

**Correlation Analysis**

Pearson correlations showed that external shame was strongly and positively correlated with the frequency of paranoid ideation ($r = .62; p < .01$). Social safeness was negatively and strongly correlated with current external shame ($r = -.50; p < .01$), as well as negatively and moderately correlated with frequency of paranoid ideation ($r = -.36; p < .05$). Results did not show a significant association between conviction and external shame ($r = .25; p = .137$) and social safeness ($r = -.12; p = .480$), or between distress and social safeness ($r = -.06; p = .709$).

**Mediation Analyses**

The total (c), direct (c0), and indirect effects (ab) of frequency of paranoid ideation on social safeness, mediated by external shame, were estimated. As can be seen in Fig. 1, $a = 0.282$, $b = -0.764$, $c = -0.271$, and $c^0 = -0.055$

<table>
<thead>
<tr>
<th>Sociodemographic variables</th>
<th>Total sample (n = 37)</th>
<th>Male (n = 30)</th>
<th>Female (n = 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>37.14 (7.27)</td>
<td>35.90 (6.99)</td>
<td>42.43 (6.40)</td>
</tr>
<tr>
<td><strong>Education level, n (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th–6th grade</td>
<td>5 (13.5)</td>
<td>5 (16.7)</td>
<td>–</td>
</tr>
<tr>
<td>7th–9th grade</td>
<td>5 (13.5)</td>
<td>5 (16.7)</td>
<td>–</td>
</tr>
<tr>
<td>10th–12th grade</td>
<td>13 (35.1)</td>
<td>12 (40)</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td>Higher education</td>
<td>14 (37.8)</td>
<td>8 (26.7)</td>
<td>6 (85.7)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>32 (86.5)</td>
<td>28 (93.3)</td>
<td>4 (57.1)</td>
</tr>
<tr>
<td>Living with partner</td>
<td>2 (5.4)</td>
<td>1 (3.3)</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td>Married</td>
<td>2 (5.4)</td>
<td>1 (3.3)</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td>Divorced</td>
<td>1 (2.7)</td>
<td>–</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td>Working status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>10 (27)</td>
<td>8 (26.7)</td>
<td>2 (28.6)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>17 (45.9)</td>
<td>14 (46.7)</td>
<td>3 (42.9)</td>
</tr>
<tr>
<td>Retired</td>
<td>6 (16.2)</td>
<td>5 (16.7)</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td>Student</td>
<td>4 (10.8)</td>
<td>3 (10)</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td><strong>Clinical variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at disease onset</td>
<td>23.86 (7.37)</td>
<td>23.13 (6.61)</td>
<td>27 (10.03)</td>
</tr>
<tr>
<td>Age at treatment onset</td>
<td>25.38 (7.30)</td>
<td>24.9 (6.69)</td>
<td>27.43 (9.86)</td>
</tr>
<tr>
<td>Number of hospitalisations, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>3 (8.1)</td>
<td>3 (10)</td>
<td>–</td>
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<tr>
<td>1</td>
<td>9 (24.3)</td>
<td>6 (20)</td>
<td>3 (42.9)</td>
</tr>
</tbody>
</table>
The indirect effect can be obtained by multiplying $a$ and $b$, such that in this case $ab = -0.215$. This indirect effect is statistically different from zero, as revealed by a 95% BC bootstrap confidence interval that does not include zero ($-0.450$ to $-0.047$). Overall, this suggests that the impact of frequency of paranoia in social safeness was operated through external shame.

**Discussion**

The present study sought to explore the relationship between frequency of paranoid ideation, external shame, and social safeness in a group of patients with current psychosis. Furthermore, we intended to analyse if external shame would be an important mechanism underlying the association between frequency of paranoid ideation and social safeness. Results from correlation analyses corroborate our previous hypotheses, except for the lack of associations regarding paranoid-related conviction and distress. One possible explanation for these results is that conviction of paranoid thoughts may function as a defence strategy that reduces uncertainty and therefore negative affect (e.g., anxiety, shame). Furthermore, social safeness is rooted in a different affect-regulation system (soothing system); thus, a decrease in conviction (defence system) does not necessarily imply an activation of the soothing system (social safeness). The same processes might be involved in the absence of an association between distress and social safeness (Gilbert, 2010; Gilbert et al., 2005).

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**Table 2** Means, standard deviations, and range of the measures under consideration

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC_Freq</td>
<td>38.03</td>
<td>14.58</td>
<td>18–64</td>
</tr>
<tr>
<td>OAS_Total</td>
<td>13.14</td>
<td>6.59</td>
<td>0–27</td>
</tr>
<tr>
<td>SSPS</td>
<td>34.78</td>
<td>11.12</td>
<td>15–52</td>
</tr>
</tbody>
</table>

*Note: SD = standard deviation; PC_Freq = frequency subscale of the Paranoia Checklist; OAS_Total = total score of the Other as Shamer Scale; SSPS = Social Safeness and Pleasure Scale.*
Our results revealed that external shame was strongly and positively correlated with the frequency of paranoid ideation. This goes in line with results from previous studies linking shame to psychopathology in general and psychotic symptoms in particular. Various studies have shown the key role of shame in the maintenance of paranoia (Gilbert et al., 2005; Matos et al., 2013; Mills et al., 2007; Pinto-Gouveia et al., 2014). External shame, which is an output from the activation of the threat-defence system and functions as a cognitive-emotional response to cues of social threat, can contribute to the recruitment of paranoid attributions as a safety strategy. This style of thinking could in turn be associated with feelings of vulnerability to threat and perceptions of others as hostile, dangerous, and harmful (Garety, Kuipers, Fowler, Freeman, & Bebbington, 2001).

Correlation results also showed social safeness to be negatively correlated with current external shame and frequency of paranoid ideation. These results corroborate results from others, studies. Paranoia-based defence strategies such as hostility, submission, and isolation have long been associated with decreasing social contacts and reduced engagement with social interaction (Freeman et al., 2002; Freeman et al., 2005; Gilbert, 2001). Shame-related defensive strategies are also known as leading to unintended consequences (Gilbert, 1998), such as a progressive decrease of social contacts and reduced pleasure obtained from social interactions. Specifically, in psychosis, low perceived social rank, shame, and social anxiety have been found to relate to difficult affiliative processes through strategies as avoidance and submissive behaviours (Allison et al., 2013; Birchwood et al., 2006). Our results add to the previous research by showing that increased levels of paranoid ideation and external shame are not only associated with diminished social interactions but also with the quality of these interactions (i.e., reduced feelings of belonging and warmth in social interactions). This may be related to difficulties in the activation
of soothing-based strategies in distressing situations, contributing to the perception of social interactions as stressful, aversive, and hostile events.

The results from the mediation analysis suggest that the impact of the frequency of paranoid ideation in the decrement of social safeness operates through current feelings of external shame. Our results seem to indicate that the feeling that one exists in the minds of other as someone with negative characteristics or lacking positive ones (external shame) is the key variable in difficulties shame seems to be fully responsible for the relationship between perceiving others as harmful/hostile and the lack of social safeness and connectedness.

Feelings of safeness and contentment in relationships are associated with the emotion regulation system responsible for the regulation of threat and the promotion of feelings of well-being and contentment (safeness- soothing system). Gumley et al. (2010) highlighted an underdevelopment of this system in people with psychotic symptoms. On the other hand, the threat-defence system would be overly activated. Our results indicate that when social interaction-related defence outputs (such as paranoid beliefs) arise, the negative evaluations of the self as seen by others (external shame) might entrap the individual dampening feelings of safeness, belonging, and acceptance in social interactions.

Several limitations should be considered in the present study. The cross-sectional nature of the study’s design does not allow for conclusions to be drawn regarding stability of the mediation model over time. The size and representativeness of the sample (which was biased, comprising mostly males, single, living with their parents) introduces bias that could compromise the generalisability of results. Additionally, although bootstrapping method was used, the mediation results should be interpreted with caution, as the sample size was indeed small. Further research with a larger sample size is needed to corroborate these findings. The use of self-report measures (instead of interviews that allow to make a more reliable and sensitive evaluation of symptoms) and the need to control confounding variables such as medication should also be considered as limitations to be tackled in future studies aiming to replicate these findings.

Clinical Implications

The present findings seem to suggest that external shame could be considered as a therapeutic target in interventions with patients with paranoid ideation in fostering social safeness. Compassion-focused therapy (CFT) can be considered as an option. CFT as a therapeutic approach was designed to help individuals with high levels of shame, by promoting a compassionate stance towards the self and others (Gilbert, 2005). Moreover, CFT attempts to encourage and develop self-soothing behaviours, foster self-acceptance and help people feel connected to others (Gilbert & Irons, 2005; Gilbert & Procter, 2006). In fact, our findings seem to tie in and support recent studies that have demonstrated the usefulness of CFT in improving social-related outcome among patients recovering from psychosis (Braehler et al., 2013).
References


