The relationship between alexithymia, defense mechanisms, eating disorders, anxiety and depression

La relazione tra alessitimia, meccanismi di difesa, disturbi del comportamento alimentare, ansia e depressione

VITTORIO LENOZO1, NADIA BARBERIS2, MARCO CANNAVÒ2, ANTONELLA FILASTRO3, VALERIA VERRASTRO1, MARIA CATENA QUATTROPANI2

E-mail: vittorio.lenzo@unicas.it

1Department of Human, Social and Health Sciences University of Cassino and South Latium, Cassino, Italy
2Department of Clinical and Experimental Medicine, University of Messina, Messina, Italy
3IPUE - Istituto di Psicologia Umanistica Esistenziale “Luigi De Marchi”, Rome, Italy
4Department of Surgical and Medical Sciences, “Magna Graecia” University of Catanzaro, Italy

SUMMARY. Introduction. Research suggests that alexithymia is a significant element for emotion processing, while defense mechanisms proved to be important factors for adjusting to stressful life events and to cope with potential psychopathologies. Aims. The aims of the present study are to examine the relationships between alexithymia, defense mechanisms, depression, anxiety and eating disorders and to examine the mediation role of defense mechanisms in the relation between alexithymia and anxiety, depression and eating disorders. Material. In a sample of 283 subjects, aged 18-49 (M=2.33, DS=4.81), instruments were administered to measure alexithymia, defense mechanisms, depression, anxiety and eating disorders. Results. This study showed that alexithymia was positively related to anxiety, depression, disadaptive style defense mechanisms, image-distorting style defense mechanisms, self-sacrificing style defense mechanisms, whereas it was negatively related to Mature Style Defense Mechanisms. Implications of the findings are discussed.

KEY WORD: alexithymia, defense mechanism, anxiety, depression, eating disorders.

RIASSUNTO. Introduzione. Numerose ricerche hanno evidenziato che l’alessitimia è un elemento significativo per l’elaborazione delle emozioni, mentre i meccanismi di difesa si sono rivelati fattori importanti per adattarsi a eventi di vita stressanti e per far fronte a potenziali psicopatologie. Scopo. Lo scopo di questo studio è di indagare le relazioni tra alessitimia, meccanismi di difesa, depressione, ansia e disturbi del comportamento alimentare. Un altro scopo di questo lavoro è di indagare il ruolo di mediatore dei meccanismi di difesa nella relazione tra alessitimia, ansia, depressione e disturbi del comportamento alimentare. Materiali. Un campione di 283 soggetti, con un’età compresa tra i 18 e i 49 anni (M=2.33, DS=4.81), ha preso parte a questa ricerca. Sono stati impiegati degli strumenti per misurare l’alessitimia, i meccanismi di difesa, la depressione, l’ansia e i disturbi del comportamento alimentare. Risultati. Lo studio ha mostrato che l’alessitimia è correlata positivamente con ansia, depressione, disadattamento psicologico generale, rischio di disturbi del comportamento alimentare, stile difensivo disadattativo, stile difensivo di distorsione dell’immagine, stile difensivo di auto-sacrificio. L’alessitimia è inoltre correlata negativamente con lo stile difensivo maturo. Le implicazioni di questi risultati sono discusse.

PAROLE CHIAVE: alessitimia, meccanismi di difesa, ansia, depressione, disturbi del comportamento alimentare.

INTRODUCTION

Alexithymia is a described as a disorder of affect regulation and is characterized by difficulty in identifying and verbalizing emotions, paucity of imagination, externally oriented cognitive style, and emotional deregulation. People with alexithymia show difficulties in distinguishing and describing emotions, a paucity of humour and imagination and concrete cognitive style.

Furthermore, alexithymia is described as a difficulty in distinguishing among emotions and experiencing them consciously. Alexithymia is generally associated with health problems such as heart diseases, but is also present in healthy people. Several studies showed that alexithymia is a transdiagnostic factor for many psychopathologies, it is a negative factor of outcome for psychotherapy and for the creation of the therapeutic alliance. Furthermore, previous studies have implicated both environmental and developmental factors, in particular parenting style, in the aetiology of alexithymia.
Several findings showed a significant association with depression and anxiety and eating disorders (EDs) and alexithymia.

Defense mechanisms have been considered as unconscious functions of the ego used in order to protect oneself from anxiety. Defense mechanisms can be conceptualized on a continuum that ranges from mature to immature. Individual defenses that are conceptually and adaptively similar are typically clustered together into higher-order defense levels. Research supported this for the theory. Previous studies have investigated both environmental and developmental factors implicated in defense mechanisms development. Porcerelli et al. highlighted that the less frequent use of maladaptive defenses by mothers predicted greater attachment security, better social-emotional competence, and fewer behavior problems in children. Maternal ability to use adaptive defense mechanisms during stressful times allows her to support the child’s psychological development and regulatory capacities.

Moreover, Boerner et al. suggested that the level of a mature defense style moderated the association between self-reported trauma experiences and both negative and positive affectivity. Individuals with more functional defense mechanisms are able to cope with problems successfully, consequently their level of distress is reduced. Previous findings show that personality traits predict individual defense mechanisms and previous researches have shown how personality aspects play an increasingly prominent role in the relationship with defense mechanisms. For instance, neuroticism has been shown to be a relevant factor in the prediction of the usage of dysfunctional defense mechanisms as a way to cope with stress.

Consistent findings have shown that an excessive use of immature defenses is related to both less favourable personality characteristics and affective disorders. Moreover, immature defensive patterns are consistently related to alexithymia. Defense mechanisms have been considered by clinical studies since they have special importance in clinical populations. Some authors hypothesize that alexithymia represents a primitive mental defense and that the deficit in processing emotional information subcomponent can be seen as a way of minimizing emotional involvement, in order to protect the self.

Defense mechanisms intervene in our way of perceiving reality and coping with problems, and for this reason they have a seminal role in EDs and in both depression and anxiety.

EDs are characterized by various eating-related problems such as dietary restriction, purging and binge eating that cause severe distress or apprehension about weight and shape. Depression is characterized by a loss of interest in previously pleasurable activities, sadness, irritability, feelings of worthlessness, hopelessness, guilt, concerns over death, or suicidal ideation, sleep disturbances, decreased energy, indecisiveness, or distracted attention, whereas anxiety is characterized by feelings of worry about something with an uncertain outcome that may cause physical symptoms, such as fast heart rate.

Several studies consistently found that, compared to healthy controls, individuals with an EDs used more maladaptive defensive functioning styles.
RESULTS

Table 1 shows Means, Standard Deviations (SD) and the correlations among the dimensions of the questionnaires. DIF correlated with depression, anxiety, maladaptive style (MS), image-distorting style (IS), self-sacrificing style (SS), GPM and EDR. DDF correlated with depression, anxiety, MS, IS, and GPM. External-oriented thinking (EOT) negatively correlated with adaptive style (AS). Depression correlated with anxiety, MS, IS, SS, GPM and EDR. Similarly anxiety correlated with MS, IS, SS, GPM and EDR. MS correlated with GPM and EDR. IS and SS correlated with GPM.

In our study, we used Structural Equation Modeling (SEM) to examine the relationship of variables. In this model DDF and EOT are the predictor variables, MS, IS, SS and AS are variable mediation, depression, anxiety, GPM and EDR are the outcomes.

Analysis of the covariance matrices was conducted using EQS 6.2 and solutions were generated based on maximum-likelihood estimation.

Estimation of the saturated model, and therefore no fit indices were reported, showed a significant path from DIF to MS (β=.46; p<.05), SS (β=.21; p<.01), depression (β=.24; p<.05), anxiety (β=.33; p<.05), and GPM (β=.30; p<.05). DDF was related with IS (β=.15; p<.05). Furthermore EOT was related with AS (β=.17; p<.05), and anxiety (β=.14; p<.05). Moreover MS was predicted depression (β=.45; p<.05), anxiety (β=.39; p<.05), GPM (β=.52; p<.05) and EDR (β=.38; p<.05). AS was predicted depression (β=.17; p<.05), anxiety (β=.15; p<.05) and GPM (β=.12; p<.05).

In accordance with common procedure to test the saturated model all nonsignificant paths were removed and several indices indicated that the data fit the final model (Figure 1). χ²(24)=32.55; p=.11, CFI =.99, RMSEA=.04 (90% CI=.00-.06). The results showed a significant path from DIF to MS (β=.46; p<.05), SS (β=.16; p<.05), GPM (β=.32; p<.05), depression (β=.26; p<.05) and anxiety (β=.30; p<.05). GPM was related to IS (β=.18; p<.05), while EOT was related with AS (β=.18; p<.05) and anxiety (β=.14; p<.05). Moreover there were a significant path from MS (β=.34; p<.05) and AS (β=.12; p<.05), to anxiety, and from MS (β=.44; p<.05) and AS (β=.13; p<.05) to depression. Furthermore there were a significant path from MS to EDR (β=.30; p<.05) to GPM. Moreover there was a significant path from MS to EDR.

CONCLUSIONS

As expected, depression was positively related with DIF, DDF, MS, IS, SS, anxiety, GPM and EDR. These findings are consistent to previous studies, which shown that high level of
The relationship between alexithymia, defense mechanisms, eating disorders, anxiety and depression

Alexithymia are related to depression\(^{12}\). Depressive symptoms are associated with a worse outcome in a wide range of diseases\(^{33-35}\) and patients with depression typically engage in emotional inhibition strategies to deal with their symptoms and consequently they have more difficulties in subjectively identifying and describing their emotions\(^{66}\). Patients with depression typically are not able to use functional way to recognize emotions properly, consequently they may be more prone to maladjustment\(^{12}\).

Furthermore, depression was positively related to MS, IS, SS. These results are consistent to previous findings which highlighted how low defense maturity were associated with depressive symptoms\(^{16}\) and how mature defense style is less common\(^{38}\). The usage of dysfunctional defense mechanisms by individuals with depression may represent either the influence of an active disabling illness, or a potentially pre-morbid risk factor for the development and maintenance of the disorder itself\(^{67}\).

Furthermore, depression was positively related with anxiety, GPM and EDR. These results are consistent to previous findings, which highlighted a positive correlation between anxiety and depression and how mature defense mechanism positively relate with them\(^{38,40}\). In presence of anxiety, individuals may have difficulties to successfully adjust to both contextual and emotional demands, consequently they may use less adaptive defense mechanisms in order to cope with potential threats\(^{31}\).

<table>
<thead>
<tr>
<th>Table 1. Descriptive analyses and correlations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

Note: ** p<.01; *p<.05

Figure 1. Full mediation models between alexithymia, defense mechanism, anxiety, depression and eating disorders.

Note: coefficients shown are standardized path coefficients. Dotted lines represent non-significant parameters.
As expected, GPM positively related with DIF, DDF and TAS total score.

ED might be a result of difficulty in regulating the negative emotions that accompany perceptions, and people with low levels of emotion management usually experience difficulties in identifying and expressing emotions, and in distinguishing between emotional states and physical sensations.

Furthermore, GPM was positively related with MS, IS, SS. These results are consistent with previous results that consistently found, compared to non-eating-disordered controls, individuals with an eating disorder used more maladaptive defensive functioning styles.

The usage of immature defense mechanisms in ED may represent either the influence of an active impairment, the result of a prolonged disorder that affects one’s functioning, or a potentially premorbid risk factor for the development and maintenance of the disorder.

These findings provide general support a hierarchical view of defense mechanisms.

Our results may support the hypothesis that mature defense mechanisms promote adjustment, since they allow an individual to view his environment in a functional way, protecting him against depression, anxiety and eating disorder.

The purpose of this study was to test a mediation model in which the relationship between alexithymia depression, anxiety and eating disorders is mediated by defense mechanisms.

Our results are in line with previous findings that integrate alexithymia and defense mechanisms concurrently, suggesting that less presence of alexithymia is (indirectly, through increased mature defence mechanisms) associated with fewer eating disorders, depression and anxiety. The persistent experience of emotion processing impairment may not allow the development of adequate strategies to self-regulate emotion, and this could be translated into maladaptive compensatory behaviours to modulate emotions, such as eating disorders, whereas individuals with more adaptive defense mechanisms may be more likely to understand, regulate, and use emotional information to cope with daily stressors and threats, consequently they may tend to be more adapted to their environment and have a better adjustment, resulting in a better level of adaptation. Difficulties in identifying and describing emotions and dysfunctional emotion regulation may be associated with dysfunctional support-seeking strategies, and consequently this may inhibit the development of adaptive defense mechanisms, whereas an adaptive ability to understand, regulate, and use emotional information may facilitate the usage of more mature defense mechanisms.

Finally, this study provides a relevant contribution to the relationship between alexithymia, depression, anxiety and eating disorders. In the present study, there are some limitations to take into account. Firstly, the small number of participants necessitates caution about the generalizability of the results. Secondly, the exclusive use of self-reports for measuring a subjective experience could increase measurement bias, for this reason, future studies should use objective measures and/or multi-ratering sources.

Despite these limitations, this study provides significant practical and theoretical insights.

First of all, from a practical point of view, the results underline the fact that individuals with immature defense mechanisms and high levels of alexithymia might be vulnerable to developing maladjustment.

Psychotherapies and psychological training programmes that have shown their efficacy in preventive and clinical contexts could integrate alexithymia and defense mechanisms assessment in order to provide a more complete view of psychopathology.

Assessing alexithymia and defense mechanism may facilitate adherence in psychotherapy and constitute a beneficial factor of outcome, consequently, changing in defense mechanism functioning may be an important aspect of psychotherapy that is related to improved symptoms during psychotherapy.

Finally, integrating aspects of alexithymia and defense mechanisms should provide a more holistic and comprehensive model for the understanding of psychological mechanisms underlying psychological maladjustment.

Conflict of interests: the authors have no conflict of interests to declare.

REFERENCES

The relationship between alexithymia, defense mechanisms, eating disorders, anxiety and depression