GLOBUS

Globus An International Journal of Medical Science, Engineering and Technology
A Refereed Research Journal
Vol 11 / No 1 / Jan-Jun 2022 ISSN: 2319-8958

INTERPERSONAL COMPETENCE AND ALEXITHYMIA IN PATIENTS WITH BORDERLINE PERSONALITY DISORDER

[*] Ripan Sippy
[**] Dr Preeti Dixit

Paper Received: 16.06.2022 / **Paper Accepted**: 31.07.2022 / **Paper Published**: 09.08.2022
Corresponding Author: Ripan Sippy; doi:10.46360/globus.met.320221019

Abstract

A growing number of literature and empirical research documents a relationship between personality disorders and emotional dysregulation & interpersonal problems. Greater interpersonal problems and emotional dysregulation have been seen in those who having low Interpersonal Competence and high alexithymia. Surprisingly, in Indian setting there is paucity of research that explores the nature of interrelationships and interactions among these determining factors in personality disorders. This study was taken up to find out the association between these variables in persons with borderline personality disorders.

Aim: To study Interpersonal Competence and alexithymia in borderline personality disorders.

Material and Methods: Cross sectional hospital based study, 50 borderline personality disorders patients diagnosed as per DSM-V were selected by purposive sampling. Fifty healthy matched subjects constituted the control group. Assessment was done using General Health Questionnaire, Brief Interpersonal Competence Questionnaire (ICQ-15) and Toronto Alexithymia Scale. The statistical analysis was carried out using SPSS Windows 17.0 software package. The analysis of the data was done using different descriptive and inferential statistics.

Results: Significant differences were seen in Interpersonal Competence and Alexithymia between the borderline personality disorder group and normal control group. The BPD group scored significantly low on Interpersonal Competence in comparison with control group. Further, borderline personality disorder group scored significantly higher on alexithymia than the normal control group. Relationship between Interpersonal Competence and alexithymia was found to be negatively correlated.

Conclusion: These findings suggest an association between low Interpersonal Competence, high alexithymia and borderline personality disorder and support this idea that treatment of borderline personality disorder should lay focus on these factors.

Keywords: Borderline Personality Disorder, Interpersonal Competence, Alexithymia.

Introduction

Personality determine behaviour and influence a broad range of human life events and outcomes (Kankaraš, 2017). Personality Disorders (PDs) causes significant impairments across a wide range of situations (Kulacaoglu & Kose, 2018). In spite of that PDs have been a neglected subset of all psychiatric disorders, Borderline Personality Disorder (BPD) and Antisocial Personality Disorder (ASPD) are the two most complex disorders of personality noted. All in all, PDs exert a great toll on health resources, and this is especially true for BPD (Bozzatello, Garbarini, Rocca, & Bellino, 2021). Personality factors do so not only through their direct effects on life outcomes, but also through their indirect effects on other important personal factors and intermediate life events (Kankaraš, 2017). It seems particularly true in the case of BPD, which is a mental disorder with a high burden on patients, family members, and health-care systems (Bohus, Stoffers-Winterling, Sharp, et al., 2021). It is associated with high rates of unemployment, absences from work and inefficiency at work, with only 25% of them work full time and 40% receive disability payments (Gunderson, Stout, McGlashan, et al., 2011). As all PDs, BPD arises during adolescence or young adulthood (Bozzatello, Garbarini, Rocca, & Bellino, 2021). What is more, a coherent syndrome of BPD typically onsets during adolescence (after age 12 years). Furthermore, it is often preceded by or co-develops with symptoms of internalising disorders like depression and anxiety, and externalising disorders such as conduct problems, hyperactivity, substance use, or both (Bohus, Stoffers-Winterling, Sharp, et al., 2021). It is therefore crucial to screen the PD in its initial stages in order to start right treatment, thus ameliorating the prognosis of this condition (Bozzatello, Garbarini, Rocca, & Bellino, 2021). It is important to note that awareness of BPD is key to appropriate early intervention (Bohus, Stoffers-Winterling, Sharp, et al., 2021). The diagnostic criteria of BPD are divided into four dimensions: (a) Interpersonal instability dimension, which has the features of fear of abandonment and intense

*Research Scholar, Department of Psychology, Kalinga University, Naya Raipur, Chhattisgarh, India.
**Supervisor & Professor, Department of Psychology, Kalinga University, Naya Raipur, Chhattisgarh, India.

unstable relationships; (b) cognitive and/or self-disturbance, which consists of paranoid ideations, dissociative symptoms, and identity disturbances; (c) affective and emotional dysregulation; and (d) behavioral dysregulation dimension, which has impulsivity and suicidal behavior (American Psychiatric Association, 2013). Patients with BPD suffer considerable morbidity and mortality compared with other populations (Kulacaoglu, & Kose, 2018). The presence of a PD also interferes with response to treatment of physical and psychiatric comorbidities, such as migraine, HIV, anxiety disorders and substance use disorders (Walter, Gunderson, Zanarini, et al., 2009) to name a few. BPD is associated with lack of long-term relationships, increased partner conflict, sexual risk-taking, low levels of social support, low life satisfaction, and increased service use (Bohus, Stoffers-Winterling, Sharp, et al., 2021). It was previously regarded as untreatable condition, but new progresses in understanding underlying causes and management have resulted in earlier diagnosis and better treatment outcomes (Bohus, Stoffers-Winterling, Sharp, et al., 2021). However, poor treatment adherence causes a great hurdle in these cases. Adherence is a complex behavior (from minor refusals to abandonment of treatment), may be affected negatively by various factor (Mirhaj Mohammadabadi, Mohammadsadeghi, Eftekhar Adrebili, et al., 2022), such as emotion regulation difficulties, hyper-reactivity and cognitive biases. Since long, data provide clear evidence that patients with BPD show a specific emotional hyper-reactivity with respect to schema-related triggers like trauma and interpersonal situations (Sauer, Arens, Stopsack, Spitzer, & Barnow, 2014). Borderline Interpersonal-Affective Systems (BIAS) model also purports that harmful early life relationships and subsequent conflictual relationships lead individuals with BPD to develop a sensitivity to interpersonal threat in the form of attentional and appraisal biases (Fitzpatrick, Liebman, & Monson, 2021). Hence, for understanding the cause of BPD and increase the treatment success ratio, there is desperate need for the exploration of other possible associated factors involved, which are not well researched yet in Indian setting (De Sousa, Ansari, & Matcheswalla, 2006); such as Interpersonal competence and alexithymia.

Interpersonal Competence

Interpersonal Competence (IC) is often defined as a particular communication ability in interacting with others in a manner intended to achieve certain results or objectives (McConnell, 2018). It reflects social skills and knowledge that enhance the quality of personal relationships. Competence is conceptualized as a multifaceted construct that reflects diverse social skills required to initiate and maintain relationships over time. According to Campbell, Steffen, and Langmeyer (1981), competence enhances an individual's capacity to interact effectively across relationships and social situations. This means that when someone is competent, they are more likely to have the skills and knowledge necessary to engage with others in a positive and productive manner. It has five dimensions as: Listening, Rapport Building, Initiative, Respecting Others and Social Intelligence. The grandness of IC is recognized universally by philosophers and scientists of human interaction (Spitzberg, & Cupach, 1989), as it is in fact important to quality of life (Spitzberg, & Cupach, 1989). Interpersonal competence affects not only social satisfaction, but other aspects of life functioning, for instance, individuals who are less socially skilled are more likely to have difficulty maintaining personal relationships and to experience greater loneliness (Sphzberg & Hurt, 1987). Hence, being able to express thoughts and feelings clearly and accurately allows individuals to convey their needs, desires, and boundaries to others. It also enables them to actively listen and understand the perspectives and emotions of those they interact with; it is necessary for health and adaptation (Nicolò, et. al., 2010). Having IC has two-fold benefits on one hand, it makes the individual skilled in the behavior necessary for effective face-to-face interactions. On the other hand, it helps one to interpret the behavior of others so that one can adjust own behavior, accordingly (McConnell, 2018). Nevertheless, persons with BPD lack these skills, clinical theory and experimental data indicate that individuals with BPD are interpersonally hypersensitive, often distorting social cues, forming extreme opinions of others, and making negative attributions about others' actions and even facial expressions (Gunderson, & Lyons-Ruth, 2008); Daros, Zakzanis, & Ruocco, 2013); Roepke, Dziobek, Preissler, Ritter, & Heekeren, 2010). Borderline patients also show an enhanced emotional cortical reactivity to unpleasant stimuli that indicates an emotional dysfunctioning in BPD patients (Marissen, Meuleman, & Franken, 2010). These patients generally avoid close social relations or they only form superficial bonds (Nicolò, et al., 2010). Without the ability to effectively navigate social interactions and relationships, individuals may struggle to form meaningful connections, experience loneliness and isolation, and have difficulty meeting their social and emotional needs. To acquire or enhance IC, one must continually observe others and interpret their actions and arrange one's behavior to suit the objectives of any particular interaction (McConnell, 2018). Having a high level of interpersonal competence requires different skills, including interaction and relationship initiation, assertion of personal rights

and displeasure with others, self-disclosure, emotional support and management of interpersonal conflict (Buhrmester, Furman, Wittenberg, Reis, 1988). IC involves treating "others with courtesy, sensitivity, and respect", and considering and responding "appropriately to the needs and feelings of different people indifferent situations" (National Conservation Training Center, 2013). IC is assessed in terms of one's ability to achieve personal goals in social interaction while maintaining positive relationships with others (Rubin & Rose-Krasnor, 1992). Other construct, which can make it challenging for individuals to connect with others on an emotional level and may contribute to difficulties in forming and maintaining relationships is Alexithymia.

Alexithymia

"Alexithymia" is a construct that stems from psychoanalytic thought and that literally means "no words for emotions" (De Rick & Vanheule, 2007). Alexithymia refers to a difficulty in identifying and expressing emotions, as well as a limited ability to understand and describe one's own feelings. This can make it challenging for individuals to connect with others on an emotional level and may contribute to difficulties in forming and maintaining relationships. They have lack of positive emotions with a high prevalence of negative emotions (Valkamo, Hintikka, et al., 2001; Haviland & Reise, 1996). Alexithymia has also been linked to a higher risk of developing mental health issues, such as depression, anxiety, and substance abuse. Without the ability to effectively identify and express their emotions, individuals may struggle to cope with and regulate their feelings, leading to emotional distress. They preoccupied with somatic symptoms, emphasize communication through action and nonverbal behaviour, avoid close interpersonal relationships and tend to be socially conforming (Haviland & Reise, 1996). Alexithymia is associated with older age, male sex, lower socioeconomic status, fewer years of education, single marital status, and poorer perceived health (Honkalampi, Hintikka, et al., 2000; Kokkonen, Karvonen, et al., 2001). The prevalence of alexithymia has been found to be 10% to 13% among general population samples (Salminen, Saarija¨rvi et al., 1999; Honkalampi, Hintikka et al., 2000). Growing number of studies have shown a relationship between alexithymia and various illnesses, including Personality Disorders, particularly, borderline personality disorder (BPD) and avoidant personality disorder (AVPD) (New, Rot, Ripoll, et al., 2012). An increasing body of evidence suggests that individuals with BPD are highly responsive to the feelings of others, but may struggle to accurately interpret and respond to the emotions of others (New, Rot, Ripoll, et al., 2012; Kılıç, Demirdaş, Işık, et al., 2020). Patients with BPD without a clear understanding of their own emotions, they may struggle in perceptions of facial emotions, which, in turn, may lead to misperceptions of social signals and thus contribute to excessive emotional intensity and tension in social situations (Kılıç, Demirdaş, Işık, et al., 2020). This can lead to misunderstandings, conflicts, and a lack of emotional connection with others.

Patients with BPD have higher alexithymia (New, Rot, Ripoll, et al., 2012); which make them to have more difficulty in identifying their own emotions (New, Rot, Ripoll, et al., 2012), and poorer ability to take the perspective of others (New, Rot, Ripoll, et al., 2012). In the same line, Emotional dysregulation is one of the key symptoms of patients with borderline personality disorder (Marissen, Meuleman, & Franken, 2010). Research suggests that individuals with BPD have difficulties accurately identifying and interpreting facial expressions of disgust and anger. They may also have a tendency to misclassify faces as angry, even when they are not. Additionally, individuals with BPD may exhibit a faster preconscious vigilance for fearful facial expressions compared to happy expressions (Vestergaard, Kongerslev, Thomsen, et al., 2020); as well as, reduced ability to identify angry facial expressions and a stronger negativity bias to anger (Vestergaard, Kongerslev, Thomsen, et al., 2020). The recent study also proven that BPD patients who misperceive face emotions have the greatest mental health issues (Vestergaard, Kongerslev, Thomsen, et al., 2020).

To understand this phenomenon, the present study has been taken up to find out the association between IC and alexithymia in the persons with BPD.

Methodology

Sample

The sample consisted of 100 male participants who were selected at random from North India. Out of these 50 were patients with a diagnosis of BPD and the remaining 50 were healthy controls. Alcohol dependent cases were no more than 60 years of age. The study group was matched to the control group by age, sex, and place of living.

Tools

1. **Case history Performa:** This was developed to obtain information on demographic, clinical, personal and family details.
2. **General Health Questionnaire (GHQ-28):** GHQ-28 is a self-administered tool that contains 28 items (Goldberg & Williams, 1998). As a measure of general health, it has four subscales- somatic

symptoms, anxiety and insomnia, social dysfunction and severe depression. The test-retest reliability some eight months apart was found to be as high as +0.90. The studies show that the values for specificity of the GHQ-28 range from 74 percent to 93 percent.

3. **Brief Interpersonal Competence Questionnaire (ICQ-15)** (Coroiu, Meyer, Gomez Garibello, Brahler, Hessel, & Korner, 2015. The Brief ICQ - 15 is a short version of **Interpersonal Competence Questionnaire** which contains set of 15 questions. Interpersonal Competence Questionnaire (ICQ) was originally developed by Buhrmester and colleagues in 1988. The Interpersonal Competence Questionnaire-15 has 3 items for each of the 5 subscales: Initiation, Negative Assertion, Emotional Support, Disclosure, and Conflict Management. No differences were found between the two sexes on the ICQ-15, so one set of norms was computed for both males and females. The answers were scored on a 5-point Likert scale from 1 (= I am poor at this) to 5 (= I am extremely good at this) (Coroiu, Meyer, Gomez-Garibello, et al., 2015). The participants are invited to rate these items according to how challenging each social behavior is for them. Higher scores indicate better interpersonal competence.
4. **Toronto Alexithymia Scale (TAS-20):** The TAS-20, is a 20 item self-report instrument that assesses alexithymia (Bagby, Parker, Taylor, 1994). It has a three-factor structure that is theoretically consistent with the alexithymia construct. The three factors comprise three subscales. The reliability and validity of the TAS-20 has been supported by factor analysis, good internal consistency, and high test-retest correlations over a 3-week period, consistent with the trait perspective of alexithymia. This scale has demonstrated excellent psychometric properties (Pandey, Mandal et al., 1996). Each item is scored on a **5**-point Likert-type scale (**1** = strongly disagree; **5** = strongly agree). Higher scores indicate greater impairment/challenges.

Procedure

Fifty patients with diagnoses of BPD as per DSM-V criteria and fulfilling the inclusion and exclusion criteria were taken for the study. After establishing rapport, a clinical interview was held and informed consent was taken. The personal data sheet was filled and Brief Interpersonal Competence Questionnaire (ICQ-15), and Toronto Alexithymia Scale were administered. Similarly, GHQ-28 and all the above-mentioned scales, except ICQ-15, were administered on the control group who fulfil the inclusion and exclusion criteria.

Data Analysis

Data was analyzed using SPSS (version 17.0.) statistical program. Student's t test was used to obtain the p value and level of significance was taken as .05. To find out the relationship between the two variables Pearson's Product Moment Correlation was calculated.

Result

The analysis of the data and the results are presented below in the form of graphs and tables.

Table 1-A: Mean and Standard Deviation of Interpersonal Competence and Alexithymia Between BPD and Healthy Controls

	Groups	N	Mean	Std. Deviation
IC	Healthy controls	50	59.3400	16.51543
	BPD	50	43.6600	19.92497
AL	Healthy controls	50	40.6200	17.00047
	BPD	50	49.2000	15.09426

Table 1-B: Summary of the t-test for BPD and Healthy Controls on Interpersonal Competence and Alexithymia

	Z	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
IC	4.284	98	.000	15.68000	8.41694	22.94306
Alexithymia	-2.669	98	.009	-8.58000	-14.96032	-2.19968

Table 2: Summary of the Correlation Between Interpersonal Competence and Alexithymia

		IC	ALX
IC	Pearson Correlation	1	-.890**
	Sig. (2-tailed)		.000
	N	100	100
ALX	Pearson Correlation	-.890*	1
	Sig. (2-tailed)	.000	
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

Discussion

Research on personality disorders particularly BPD has recently taken great interest. While the world literature seems to have found a relationship between early diagnosis and better treatment outcome, this seems less true within Indian context where research is lacking. Hence, the present study was taken up to fill these lacunae.

In the present study, control group was found to be high on IC scores and low on alexithymia scores. On the contrary, study group was found to be high on alexithymia and low on IC scores. These findings are in line with previous studies that considered alexithymia as a contributing factor to the development, maintenance, and exacerbation of various medical and psychiatric problems including substance use disorders (Taylor, Bagby, Parker, 1997). In a previous study, Patients with BPD reported poorer ability to take the perspective of others, but higher distress; they showed intact "empathic concern." (New, Rot, Ripoll, et al., 2012). In addition, individuals with BPD are posited to 1) experience heightened emotional reactivity specifically to perceived interpersonal threat and 2) engage in destructive behaviors both to regulate increasing emotion and to meet interpersonal needs (Fitzpatrick, Liebman, & Monson, 2021). In a relevant study by Gratz & Roemer (2004) six dimensions are reported that causes the emotion regulation difficulties including, lack of emotional awareness (*awareness*), inability to recognize emotional responses, difficulty to accept the emotional response, difficulty to transfer to goal-oriented action, limited retention of emotion regulation strategies, and incapability of controlling emotions. In short, individuals with BPD may also experience challenges in regulating their own emotions. This can manifest as difficulties in understanding and accepting their own emotional responses, struggling to effectively translate their emotions into goal-oriented actions, having limited retention of emotion regulation strategies, and feeling unable to control their emotions. These emotion regulation difficulties can further contribute to the interpersonal challenges faced by individuals with BPD. The inability to regulate emotions effectively can lead to impulsive and reactive behaviors, which can strain relationships and hinder personal growth.

High IC found in normal group can be understood in the light of previous literature that clearly explain that interpersonal competence has five dimensions: *initiating a relationship*, *asserting influence*, *self-disclosure*, *emotional support*, and *resolving conflict (*Buhrmester, Furman, Wittenberg, and Reis (1988). Initiating a relationship involves willingness to build relationships with others; asserting influence involves defense of one's own rights in interpersonal relationships; self-disclosure entails sharing of feelings and ideas with others; emotional support relates to consoling others at problematic times, and resolving conflict refers to coping with conflicts in social relationships (Buhrmester, Furman, Wittenberg, and Reis (1988). Existing research demonstrates that individuals with high interpersonal competence tend to be more agreeable in social relations, build close friendships more easily (Buhrmester, 1990), and experience greater inner satisfaction (Buhrmester, 1998).

Conclusion

This study also investigated associations between IC and alexithymia to explore the nature of inter-relationships and interactions among these

variables. In our study a negative correlation was found between IC and alexithymia. Hence, findings of the present study revealed that those individuals who suffer from alexithymia also have low IC and vice versa. Some earlier studies have also suggested that alexithymia is associated with poorer treatment outcome (Taylor & Bagby, 2000). So, these findings give a strong reason to worry because treatment of alexithymic patients is reported to be difficult due to lack of emotional awareness and externalized style of living in which behaviour was guided by rules and regulations rather than feelings (Stys & Brown, 2004). So, present findings have implications both for psychotherapy, which is generally considered as the main treatment for BPD (drug treatment is only indicated for comorbid conditions that require medication, or during a crisis if psychosocial interventions are insufficient) (Bohus, Stoffers-Winterling, Sharp, et al., 2021). Therapy and treatment that address these specific issues can be beneficial in helping individuals with BPD improve their interpersonal relationships and overall well-being.

Conflicts of Interest

The authors declare there are no significant competing financial, professional, or personal interests that might have influenced the performance or presentation of the work described in this manuscript.

References

1. American Psychiatric Association (2013). Diagnostic and Statistical Manuel of Mental Disorders. 5th ed. American Psychiatric Association; Arlington, VA, USA
2. Bagby, RM, Parker, JD and, Taylor, GJ (1994). The twenty- item Toronto Alexithymia Scale-I. Item selection and cross-validation of the factor structure. J Psychosom Res, 38, 23-32.
3. Bohus, M., Stoffers-Winterling, J., Sharp, C., Krause-Utz, A., Schmahl, C. & Lieb, K. (2021). Borderline personality disorder. The Lancet, 398(10310), 1528-1540.
4. Bozzatello, P., Garbarini, C., Rocca, P. & Bellino, S. (2021). Borderline personality disorder: Risk factors and early detection. Diagnostics, 11(11), 2142.
5. Buhrmester D, Furman W, Wittenberg MT, Reis HT (1988). Five domains of interpersonal competence in peer relationships. J Pers Soc Psychol, 55, 991-1008.
6. Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. Child Development, 61, 1101-1111. https://doi.org/10.1111/j.1467-8624.1990.tb02844.x
7. Buhrmester, D. (1998). Need fulfillment, interpersonal competence, and the developmental contexts of early adolescent friendship. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), Cambridge studies in social and emotional development. The company they keep: Friendship in childhood and adolescence (pp. 158-185). New York, NY, US: Cambridge University Press.
8. Campbell, M., Steffen, J.J. & Langmeyer, D. (1981) Psychological androgyny and social competence Psychological Reports, 48, 611-614.
9. Coroiu, A., Meyer, A., Gomez-Garibello, C., Brähler, E., Hessel, A. & Körner, A. (2015). Brief form of the interpersonal competence questionnaire (ICQ-15). European Journal of Psychological Assessment, 31(4), 272-279. doi: 10.1027/1015-5759/a000234
10. Daros, A.R., Zakzanis, K.K. & Ruocco, A.C. (2013). Facial emotion recognition in borderline personality disorder. Psychological medicine, 43(9), 1953-1963.
11. De Rick A, Vanheule S. (2007). Alexithymia and DSM-IV personality disorder traits in alcoholic inpatients: A study of the relation between both constructs. Personality and Individual Differences, 43, 119-129.
12. De Sousa, A., Ansari, Y. & Matcheswalla, Y.A. (2006). Psychopathology and Alexithymia in Personality Disorders: Comparing Borderline & Antisocial Personality Disorder. Indian Journal of Psychological Medicine, 28(2), 30-34.
13. Fitzpatrick, S., Liebman, R.E. & Monson, C.M. (2021). The borderline interpersonal-affective systems (BIAS) model: Extending understanding of the interpersonal context of borderline personality disorder. Clinical psychology review, 84, 101983.
14. Goldberg, D., & Williams, P. (1998). A User's Guide to the General Health Questionnaire. Windsor, Berks: NFER-Nelson.
15. Gratz, K.L. & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. Journal of Psychopathology and Behavioral

Assessment, 36, 41-54. https://doi.org/10.1023/B:JOBA.0000007455.08539.94
16. Gunderson, J.G. & Lyons-Ruth, K. (2008). BPD's interpersonal hypersensitivity phenotype: A gene-environment-developmental model. Journal of personality disorders, 22(1), 22-41.
17. Gunderson, J.G., Stout, R.L., McGlashan, T.H., Shea, M.T., Morey, L.C., Grilo, C.M., ... & Skodol, A.E. (2011). Ten-year course of borderline personality disorder: psychopathology and function from the Collaborative Longitudinal Personality Disorders study. Archives of general psychiatry, 68(8), 827-837.
18. Haviland M.G. and Reise S.P. (1996). California Q-set alexithymia prototype and its relationship to ego-control and ego-resiliency. J Psychosom Res, 41, 597-608.
19. Honkalampi K., Hintikka J., Tanskanen A., et. al. (2000). Depression is strongly associated with alexithymia in the general population. J Psychosom Res, 48, 99-104.
20. Kankaraš, M. (2017). Personality matters: Relevance and assessment of personality characteristics. oecd-ilibrary.org
21. Kılıç, F., Demirdaş, A., Işık, Ü., Akkuş, M., Atay, İ.M. & Kuzugüdenlioğlu, D. (2020). Empathy, alexithymia, and theory of mind in borderline personality disorder. Journal of Nervous and Mental Disease, 208(9), 736-741. https://doi.org/10.1097/NMD.0000000000001196
22. Kokkonen P., Karvonen J.T., Veijola J., et al., (2001). Prevalence and sociodemographic correlates of alexithymia in a population sample of young adults. Compr Psychiatry, 42, 471-476.
23. Kulacaoglu, F. & Kose, S. (2018). Borderline personality disorder (BPD): In the midst of vulnerability, chaos, and awe. Brain sciences, 8(11), 201.
24. Marissen, M.A., Meuleman, L. & Franken, I.H. (2010). Altered emotional information processing in borderline personality disorder: An electro-physiological study. Psychiatry Research: Neuroimaging, 181(3), 226-232.
25. McConnell, C.R. (2018). Interpersonal competence in the management of people. The Health Care Manager, 37(4), 358-367.
26. Mirhaj Mohammadabadi, M.S., Mohammadsadeghi, H., Eftekhar Adrebili, M., Partovi Kolour, Z., Kashaninasab, F., Rashedi, V. & Shalbafan, M. (2022). Factors associated with pharmacological and psychotherapy treatments adherence in patients with borderline personality disorder. Frontiers in Psychiatry, 13, 1056050.
27. National Conservation Training Center (2010). Foundational leader competencies: Interpersonal skills. US Fish and Wildlife Service, National Conservation Training Center. Available at: http://nctc.fws.gov/led/competencymodel/Foundational/inter-personal.html. Accessed: 15 May 2013.
28. New, A.S., Rot, M.A.H., Ripoll, L.H., Perez-Rodriguez, M.M., Lazarus, S., Zipursky, E., ... & Siever, L.J. (2012). Empathy and alexithymia in borderline personality disorder: clinical and laboratory measures. Journal of personality disorders, 26(5), 660-675.
29. Nicolò, G., et al. (2010). Alexithymia in personality disorders: Correlations with symptoms and interpersonal functioning, Psychiatry Res., doi:10.1016/j.psychres. 2010.07.046.
30. Pandey, R., Mandal, M.K., Taylor, G.J. and Parker, J.D. (1996). Cross-cultural alexithymia: Development and validation of a Hindi translation of the 20-Item Toronto Alexithymia Scale. J Clin Psychol, 52, 173-176.
31. Roepke, S., Dziobek, I., Preissler, S., Ritter, K. & Heekeren, H.R. (2010). Social Cognition and Emotional Empathy in Borderline and Narcissistic Personality Disorder: Behavioral and fMRI Data. In Biological Psychiatry, 67(9), 248S-248S.
32. Rubin, K.H. and Rose-Krasnor, L. (1992). Interpersonal problem solving. In: Van Hassett, V.B. & Hersen, M., editors. Handbook of social development. New York: Plenum, 283-323.
33. Salminen, J.K., Saarija¨rvi, S., A¨ a¨rela¨, E., Toikka, T. and Kauhanen, J. (1999). Prevalence of alexithymia and its association with sociodemographic variables in the general population of Finland. J Psychosom Res, 46, 75-82.
34. Sauer, C., Arens, E.A., Stopsack, M., Spitzer, C. & Barnow, S. (2014). Emotional hyper-reactivity in borderline personality disorder is related to trauma and interpersonal themes. Psychiatry research, 220(1-2), 468-476.
35. Sphzberg, B.H. & Hurt, H.T. (1987). The relationship of interpersonal competence and skills to reported loneliness across time. Journal of Social Behavior and Personality, 2(2), 157-172.
36. Spitzberg, B.H. and Cupach, W.R. (1989). An Introduction to Interpersonal Competence. In: Handbook of

Interpersonal Competence Research. Recent Research in Psychology. Springer, New York, NY. https://doi.org/10.1007/978-1-4612-3572-9_1).
37. Spitzberg, B.H. and Cupach, W.R. (1989). The Social Relevance of Competence. In: Handbook of Interpersonal Competence Research. Recent Research in Psychology. Springer, New York, NY. https://doi.org/10.1007/978-1-4612-3572-9_2).
38. Stys, Y. & Brown, S.L. (2004). A Review of the Emotional Intelligence Literature and Implications for Corrections-Research Report. Research Branch, Correctional Service of Canada, 340 Laurier Ave., West, Ottawa, Ontario, K1A 0P9.
39. Taylor, G.J., Bagby, R.M. & Parker, J.D.A. (1997). Disorders of affect regulation: Alexithymia in medical and psychiatric illness. Cambridge, England: Cambridge University Press.
40. Valkamo, M., Hintikka, J., Honkalampi, K., et. al. (2001). Alexithymia in patients with coronary heart disease. J Psychosom Res; 50, 125-130.
41. Vestergaard, M., Kongerslev, M.T., Thomsen, M.S., Mathiesen, B.B., Harmer, C.J., Simonsen, E. & Miskowiak, K.W. (2020). Women with borderline personality disorder show reduced identification of emotional facial expressions and a heightened negativity bias. Journal of Personality Disorders, 34(5), 677-698.
42. Walter, M., Gunderson, J.G., Zanarini, M.C., Sanislow, C.A., Grilo, C.M., McGlashan, T.H., ... & Skodol, A.E. (2009). New onsets of substance use disorders in borderline personality disorder over 7 years of follow-ups: Findings from the Collaborative Longitudinal Personality Disorders Study. Addiction, 104(1), 97-103.