

Original Papers

Polish Psychological Bulletin
2018, vol. 49(4) 458–465
DOI - 10.24425/124343

Elżbieta Zdankiewicz-Ścigala*
Patrycja Strzeszkowska*

Relationship between Parental Bonding, Alexithymia and Dissociation in Adults with PTSD

Abstract: Objective: The aim of this study was to examine the importance of social bonds for our ability to cope with traumatizing incidents. It is theorized that the dysfunctions related to trauma, such as alexithymia and dissociation can be linked to certain parental attitudes towards a child in an early developmental stages together with characteristics of the trauma itself, namely the identity of the perpetrator, understood as his or her social closeness to the victim.

Participants: A total number of 60 participants, selected randomly from a population, psychiatric hospital patients as well as psychotherapy centers were tested using four questionnaires (TAS-26, PSD, CES, PBI).

Results: The analyses revealed that high alexithymia levels are related to demanding attitude of the caregivers, whereas dissociation is more common in people who remember their parents as inconsequent and emotionally labile. Findings related to the connection between the identity of a perpetrator of the trauma and the sequelae showed that the dissociation levels were significantly higher in victims who suffered abuse from the hands of family member or friends than those who were harmed by unknown people.

Keywords: attachment, trauma, alexithymia, dissociation, PTSD

Attachment

According to Zazzo (1978) and Bowlby (1969, 1978, 1982, 1979), attachment originated as a result of a long evolutionary process, as it serves our survival: children, being weak and defenseless, are unable to take care of themselves, so in face of danger they have to seek help of others. Bowlby pointed out (1969) yet another significant feature differentiating human (together with other nomadic, ground – living primates) from other mammals: whereas animals such as hares or deer, when frightened, demonstrate propensity to look for a safe *place* that should save them from danger, humans in stressful situations choose rather *members of their social group* with whom they share emotional bonds. Throughout our lives, whenever we are confronted with an imminent threat, we tend to request help and comfort, at first, from our attachment figures, then, from significant others. Yet, as Bowlby notes (1979), our early interactions with protective others are crucial. If the primary relationship is secure, the child knows that other

people can make themselves available and provide help for the child if necessary. Should the primary relationship be insecure, the child could think that other people cannot be counted upon (ambivalence) or that it is unnecessary to call upon a third party in case of need (avoidance) (1978). They provide us with a framework for the later development of our Internal Working Models (IWM), constructs serving as a filter in the perception of self and the world around us (Pietromonaco et al., 2000). The IWM guides both attachment behavior and the appraisal of attachment emotions in self and others. If the attachment figure has been accessible to the child in real-life situations, the corresponding IWM of the developing child conveys an inner sense of legitimacy of the attachment emotions and of potential accessibility of help and comfort even when the attachment figure is not currently present during distressing experiences (Liotti, 2004).

When the attachment pattern is not secure, the developing IWM are constructed of fearsome and generalized predictions as to the availability of help

* SWPS University of Social Sciences and Humanities in Warsaw

in difficult situations. What is more, the disorganized attachment has this one additional characteristic that it also “brings on a dissociated (non-integrated) multiplicity of dramatic and contradictory expectations” (Liotti, 2004; Lyons-Ruth et al., 1999). To explain the exact structure of the incoherent IWM in disorganized attachment, Liotti suggest to employ a notion of the “drama triangle”, invented by Karpman (1968). A child intuitively positions itself as well as its caregiver in roles described by the drama triangle: persecutor, victim and rescuer. Infant can identify itself as well as the parent as victims of unnamed and invisible malevolent force, which endangers them both, ruining safe and peaceful interaction. The child may also perceive the caregiver as a powerful and hostile entity, responsible for causing its fear. Yet, he is the only person that can save weak and defenseless infant, personifying a victim, from looming danger. In such schema, the parent becomes both a persecutor and a rescuer. At the same time the child can identify itself as a negative character, posing threat to helpless and vulnerable parent. It may also see a possibility of bringing comfort to the frightened victim, inverting the roles again and becoming a rescuer. According to Liotti’s hypothesis (2004), a child entangled in the drama triangle receives a training in dissociation: The sequence, in the child’s mind, of multiple representations in which both the self and the other person shift among the three incompatible roles of persecutor, rescuer and victim should be understood as a metaphorical rendition of the construction of contradictory emotional (i.e., preverbal) schemata that arose during the interactions that led to disorganized attachment. These emotional-relational mental structures, encoded in implicit memory, are too complex and intrinsically contradictory to be later synthesized in a unitary, cohesive structure of explicit, semantic memory. In this sense, the IWM of early disorganized attachment is intrinsically dissociative.

The fundamental tenet of the attachment theory states that whenever an individual faces a threat, such stimuli activates immediately their attachment system – apart from possessing scanty and insufficient resources, people provided with the IWM of insecure kind seem to give up remaining deposits of strength and hope at the mere anticipation of danger. While the prospect of upcoming difficulties and pain is threatening, an expectation that requests of help will meet with rejection or indifference and that one will be left all alone to suffer – not only actually but also figuratively – is heartbreaking; it deprives an individual of will and ability to fight back against the difficulties that may arise. Whereas all of the insecure IWM increase the probability of the occurrence of post-traumatic emotional disturbances, the insecure disorganized type of IWM influences greatly the propensity to react with dissociative reactions in later crisis situations, and, as such, amplifies likelihood of the onset of PTSD symptoms following the traumatic event (Liotti, 2004).

In recent years Fonagy et al. (2009) have reformulated the goal of attachment as the creation of a symbolic representational system through which affect regulation and the development of a sense of self can come into

being. Key in this process of representation building is the caregiver’s mirroring of what the child internally experiences as “arousal” (Fonagy et al., 2002). An adequate external representation offered by the caregiver is the basis on which a secondary representational structure is established that will become activated through associative routes whenever the child is in a state of distress. This will make it possible for the child to create a sense of self and the capacity for interpersonal attachment or involvement. Throughout this article, we will use the term “attachment system” to refer to the interconnection between the representational system and the interpersonal attachment relationship.

Trauma

Studies conducted by Main and Hesse (1990) and Hesse and Main (2000) demonstrate how an abnormal relationship between a parent and an infant can induce in a child a *fright without solution* accompanied by dissociative symptoms even in those situations in which there is no sign of an evident neglect or abuse: “interactions involving a strong activation of the attachment system that although not obviously comprising maltreatment, can induce a failure in the integrative functions of consciousness at the beginning of life, deserve the name of “*early relational trauma*” (Schore, 2001; Liotti, 2004). To some extent the problem can be clarified with help of the distinction suggested by Freyd (Freyd et al., 2001). Freyd proposed to classify traumatic events on two-dimensional axis according to following characteristics: level of fear or terror the incident induced and degree to which an occurrence of trauma was an intended act of betrayal performed by attachment figures. The dimension of “social connectedness” or “betrayal” is a discrete variable, which, in turn sheds more light on the nature of the second dimension. It can be inferred from the above that, regardless of the authorship of the harm inflicted upon a victim (or lack of the said authorship, as it is in case of a hurricane), the incident can still be regarded traumatic or not, and therefore there should exist some certain class of events causing trauma (such as the examples listed by the DSM-APA, 2000; 2013). However, the level of fear that, when crossed, induces such horror can vary considerably from individual to individual. Whereas it is quite obvious that incidents characterized by low fear inducing potential and not perpetrated by others are not altogether traumatic, it is worth noticing that, on the other hand, a harm inflicted by a person whom we trust with much greater probability will cause a trauma – regardless of the amount of the suffering dealt, in many cases far lesser than the pain resulting from an injury during any natural catastrophe. Whereas Freyd et al., (2001) divides potentially traumatic events according to their characteristic of being caused by either an anonymous violent force or people remaining in a relation with a victim, Liotti (2004) takes a closer look at the differences between the incidents within the “social/betrayal” category. Even though Freyd et al., (2001) underlines the significance of the relationship between the

injured party and the perpetrator for the possible occurrence of sequelae of the traumatic event (with a particular emphasis put on the fact if the perpetrator was a caregiver), it seems as though she sees the different implications of the traumatic stressor as resulting from the variation in the *degree* of the factor (i.e. social closeness), exclusively. Liotti (2004) adds specificity to the distinction made by Freyd et al. (2001). He proposes to seek the cause of such diversity in the *quality* rather than mere *quantity* of the stressor and describes an early relational trauma as a kind of event which is unparalleled to any other malevolent act of human authorship in terms of its destructive potential.

It is thus postulated to redefine the existing approach to the issue of trauma. When considering a propensity of the development of posttraumatic stress disorder (PTSD) and other conditions related with traumatic stress, an emphasis should be put in particular on the characteristics of the individual's early attachment schemata. Attachment theory sees the origins of the disorder in an unprocessed affect which stems from unresolved mental states regarding parental bonds; it cannot be effectively incorporated into one's explicit memory as it is too incoherent and internally contradictory, i.e. dissociative. As such, it resides dormant within an individual on the level of bodily states, until a strong enough stressor triggers its emergence. From this perspective, it is not a traumatizing power of the stressful situation itself that causes most severe damage, but rather an endowment in the form of unprocessed affect that in face of overpowering threat shatters one's defenses and wreaks havoc in integrative functions of identity, memory and consciousness.

Dissociation

When a threat to one's integrity seems overwhelming and the chances to fight or run away dissolve, a victim may accomplish what Putnam calls an "escape when there is no escape" (Putnam, 1991; 1992). Despite its high effectiveness in blocking pain from conscious awareness, dissociation is a very costly and dangerous mechanism, a double-edged weapon. Its great force coupled with lack of specificity makes it capable of provoking as much chaos within identity structure as it can prevent. As Salter (2003) notes, "the power of dissociation is its ability to separate the victim from trauma; the weakness is that it can separate him from present reality as well as past." Still, in some circumstances i.e. when it comes to betrayal trauma, dissociation may serve an adaptive function. The results of the study conducted by Freyd et al., (2001) show that harm inflicted by an attachment figure is related to very poor memory recall of the abuse, regardless of the type of the maltreatment (sexual or physical) or the age of the victim. Attachment is a value itself and every individual goes to great lengths to avoid a severing of the emotional link, no matter how wounding such bond may be. These results are fully in accordance with Liotti (2004) hypothesis, that a dissociative reaction is taught in a relationship as an attempt to refuse to accept the fact that the ones

that we've loved and whom we trust intentionally make us suffer.

Alexithymia

Alexithymia bears some significant resemblance to dissociation in this respect that it is characterized by a presence of a certain barrier, which diminished dramatically one's ability to meaningfully perceive and integrate sensory input – in this case – emotions. The word alexithymia is coined by Sifneos in 1971 to describe the condition, characterized by an individual's inability to understand his/her experiences feelings and lack of words to describe these feelings to other (Maruszewski & Ścigała, 1998; Zdankiewicz-Ścigała, 2017). Alexithymia is disturbance in emotional processing can be conceptualized by difficulty in identifying and verbalizing feelings. When someone cannot express negative feelings will have trouble discharging and neutralizing these feelings either physiologically or psychologically. Ultimately, all feelings either normal or pathological become bodily feelings and appear in somatic complaints. Researchers have identified various factors as an etiology of alexithymia (Messina et al., 2014). Developmental perspective focuses on the importance of various developmental stages. In this process one cannot deny the important and the critical role of the primary caregiver of the growing child. According to this perspective the child's parents may have failed to sufficiently encourage a language of feelings or emotional trauma at any stage of the development, may account for the development of alexithymia. Children's affective expressions were associated with the amount of information, level of intensity, and types of emotion shared in their family (Zdankiewicz-Ścigała, 2017). Expression of emotions is a learning process like what to feel and how to express what they have felt in their family. When the expression of affects is constricted in families, children tended to show constricted affect. In contrast when families have high level of expressiveness their children display higher levels of unrestricted expression. Parental attitude, perceived lack of maternal care, perceive lack of warmth relationship with father, paternal indifference and maternal abuse, and attachment during childhood were associated with alexithymia and tended to play a vital role in the development of alexithymia characteristics during the resting period. After nearly 45 years of research examining the construct, alexithymia is no longer considered a deficit in emotional vocabulary per se, but considered a general deficit in the cognitive processing of emotional experience (Lane et al., 1997; Maruszewski & Ścigała, 1998; Zdankiewicz-Ścigała, 2017). Previous research suggests that alexithymia can develop as a reaction to an acute and severe traumatic event or in the presence of early life stress. Extending these findings, recent studies have illustrated that alexithymia in adults is a predictor for the development of posttraumatic stress disorder (PTSD) after exposure to psychological or physical trauma. Moreover, early life stress has often been described as a risk factor for emotional dysregulation. Accordingly, previous

studies have demonstrated a co-occurrence of early life stress and alexithymia in patients with affective disorders or disorders with prominent affective symptoms such as PTSD. Zlotnick et al. (2001) in his study furnishes us with evidence for a possible link between elevated alexithymia levels in psychiatric patients who reported physical and emotional neglect in childhood and as such it can be also recognized as one of the sequelae of early relational trauma. On these grounds, many scholars seek a connection between alexithymia and PTSD symptoms. Numerous research findings support this hypothesis (Badura, 2003; Cloitre et al., 1997; Frewen et al., 2008; Fukunishi et al., 1996; Hyer et al., 1990; Monson et al., 2004; Söndergaard & Theorell, 2004; Yehuda et al., 1997; Zlotnick et al., 2001). Similarly, people diagnosed with PTSD demonstrate a peculiar co morbidity of both arousal and numbing symptoms. Monson (Monson et al., 2004) suggested that this freezing of sensations may be an observable sign of an attempt to soothe inner turmoil and desensitize pain. Yet, a mere *faculty* to experience emotions is generally not disrupted by PTSD and, as Litz points out: “the building blocks of emotional experience (...) that were available to the individual before [he or she was] traumatized are intact, as is pretraumatic, elaborated emotional knowledge or schemas” (Litz et al., 2000). However, trauma can severely impair capability to meaningfully interpret and process feelings. Consequently, an alexithymic lineament in individuals with PTSD can be interpreted as an indicator of “an uncoupling of cognitive and emotional processing through which intense emotional states become poorly integrated with verbal cognition” (Frewen et al., 2008). As such, it can entirely abolish verbal coding of emotions. It is worth noting, that in Frewen’s model, alexithymia is simultaneously an indicator of trauma and one of the factors that may increase one’s propensity to develop PTSD symptoms after the traumatic occurrence.

The Present Study

As was mentioned above, the interdependence of PTSD and PTSD related disorders with certain attachment styles is well documented in extant psychological research. However, attachment style is merely a label evaluating a pattern of a relationship between parents and their children, meant to situate it on a continuum of constructiveness. It does not tell much about certain actions performed or not performed by the caregivers, parental techniques adopted etc. Thus a decision has been made to use Plopa’s (2008) parental attitudes concept instead of attachment classification employed by the predecessors. Plopa (2008) distinguishes six dimensions defining the parent – child relationship: acceptance, rejection, autonomy, inconsequence, over-protectiveness and posing excessive demands. It is theorized that the attitudes which are conceptually nearest the “disorganized” notion should be critical in influencing propensity to develop PTSD and dissociative reactions as well as deepen post – traumatic symptoms. Hesse and Main (2000) note that the most

salient feature in such relationships is the presence of fear, manifested by both parents and their children.

Consequently, it is proposed that attitudes potentially guided by fearful impulses should be emphasized in the analysis; ***Inconsequence, centered around emotional instability is thought to be the parental attitude, reported most commonly by the interviewees suffering from the PTSD symptoms (Hypothesis no. 1) and was chosen as a predictor for the elevated levels of the dissociative tendencies (Hypothesis no. 2).*** This style marks parental behaviors full of contradictions. Internal state of a caregiver is easily transferred on a level of interpersonal relations with a child. Appraisals and punishments are strongly dependent on his current mood. Parent is perceived as loving but unpredictable. Also, emotional detachment in childhood is a predictor of future development of alexithymia (Zlotnick et al., 2001). The researcher thought it worthwhile to select less obvious dimension, i.e. *posing excessive demands* should, which stays in accordance with theoretical assumptions addressing causes of the alexithymia syndrome. *Posing excessive demands* is manifested in putting restrictions, giving commands, imposing punishments and expectations of an absolute obedience. Parent’s attitude is moreover marked by lack of concern for child’s feelings and needs. In his evaluations he does not take into consideration the abilities of an infant or the external factors. His vision and plans concerning child obscure genuine feelings. Consequently, ***posing excessive demands can be considered as another manifestation of the rejecting attitude, because it denies child’s feelings and it was chosen as a predictor for the high alexithymia levels (Hypothesis no. 3).*** Another key issue in the present analysis is the significance of the type of a traumatic event. There exists a certain gradation of factors according to their destructive power. Hurtful potential grows progressively together with increasing level of intentionality of the harm and degree of directedness. However, a dimension of betrayal adds a whole lot to the quality of the suffering dealt. ***Therefore it is proposed that the mentioned element should distinguish merely stressful incidents from those perceived as traumatic, i.e. resulting in elevated levels of dissociative tendencies (Hypothesis no. 4).***

Measures

KPR-Roc

KPR-Roc (Questionnaire for Retrospective Evaluation of Parental Attitudes) (Plopa, 2008) consists of two separate sheets; each of them has 50 items with five point scale. Participant is asked to evaluate frequency of certain behavior manifested by his mother (the first sheet) and his father (the second sheet). Attachment figure is rated on six independent dimensions: acceptance, rejection, autonomy, inconsequence, over-protectiveness, posing excessive demands.

TAS-26

The TAS-26 (Toronto Alexithymia Scale in polish adaptation: Maruszewski, Ścigala, 1998) formed by Taylor,

Bagby and Parker (1991) is a 26-item self-report measure assessing characteristics typical of alexithymia syndrome. The questionnaire consists of 4 subscales: *Difficulty in identification of emotion*, *Difficulty in describing emotions*, *Operant mode of thinking* and *Amnesia*. The possible responses to the items are received on 5-point Likert-type scale. The level of alexithymia can be calculated for separate subscales as well as for general scale by computing the sum rating for items on each scale.

The Curious Experiences Checklist

The Curious Experiences Checklist – (CES in polish adaptation Zdankiewicz-Ścigała, et al., 2015) (Goldberg, 1999) is a 31-item self-report that contains 3 subscales: *Self-Absorption*, *Amnesia* and *Depersonalization*. A participant is asked to assess on 5-point Likert-type scale the frequency of experienced dissociative states. Composite scores can be calculated for each of the above mentioned subscales as well as added up to a total sum of gained points.

Posttraumatic Diagnostic Scale

Posttraumatic Diagnostic Scale – (PDS, in polish adaptation Dragan et al., 2012) (Foa, 1995). This self-report consists of six sections. The first one creates a 12-item list of possible traumatic occurrences. Further sections enable one to report the extent, severity and duration of PTSD-symptoms. The measure consists of 49 items. The scores can be received on general scale *Severity of PTSD-Syndrome* as well as on three separate subscales: *B – Reexperiencing of the traumatic event and numbing*, *C – Avoiding of the stimuli related with trauma* and *D – increased arousal*. The PSD demonstrated good reliability and construct validity (Foa, 1995; Dragan et al., 2012).

Procedure

Participants were informed about anonymity and voluntariness of the study. They were asked to sign a consent form and to confirm that they acknowledged all of the objectives and their rights. Each of them specified their age, sex and level of obtained education. Subsequently, they filled in Foa's PSD survey, CES, TAS-26, KPR-Roc. The questionnaires were presented in a random order with the intention of avoiding the effect of order on given responses.

Participants

Participants were 60 people selected randomly from a group of psychiatric hospital patients and psychotherapy center clients in Warsaw. Respondents were mostly women ($n=37$; 62%) and their age ranged from 17 to 64 years, with the mean of 31 years ($M=31,25$). Most interviewees (59.65%) declared "master's" as their level of education. Total number of 40 participants reported that they have experienced at least one traumatic event. Only 10 of the participants met the criteria for PTSD diagnosis and subsequent three fulfilled conditions of the ascription to the subclinical PTSD form. Thus, to enable appropriate testing of the hypotheses, the participants were further divided into following groups:

- Group no. 1. The group consisted of 13 people diagnosed with both clinical and subclinical forms of PTSD and 13 randomly selected individuals, who reported having experienced at least one possibly traumatic event. Only participants who were raised by both parents participated in the study. Respondents were mostly women ($n=19$; 63%) and their age ranged from 17 to 64 years, with the mean of 31 years ($M=31,4$). Most interviewees (57.7%) declared "master's" as their level of education.
- Group no. 2. The group consisted of all of interviewees except for three persons who reported being raised by mothers only. Respondents were mostly women ($n=36$; 63%) and their age ranged from 17 to 64 years, with the mean of 31 years ($M=31,29$). Most interviewees (59.65%) declared "master's" as their level of education.
- Group no. 3. The group consisted of 13 people who reported having experienced a trauma caused by a friend or a relative (first condition) and 13 people who experienced trauma caused by strangers (second condition). Respondents were mostly women ($n=15$; 57.7%) and their age ranged from 17 to 48 years, with the mean of 31 years ($M=30,85$). Most interviewees (57.7%) declared "master's" as their level of education.

Results

Hypothesis no. 1

Analyses were conducted using IBM SPSS (IBM Corp.; Armonk, NY, United States) ver. 23. To test the hypothesis that people diagnosed with post-traumatic stress disorder maintained a relationship with their parents characterized by high level of inconsequence, a t-test for independent samples was performed, for mother and father separately. The results of the analysis show a statistically significant differences for both mother $t(24)=-2,89$; $p=0,008$ and father $t(24)=-2,92$; $p=0,007$. *Cohen's d* = -1.14 (mothers), *Cohen's d* = -1.144 (fathers). People who have PTSD symptoms remember their parents as more emotionally labile and inconsequent ($M=34.08$; $SD=12.42$ for mothers and $M=39.54$; $SD=7.65$ for fathers) than people who do not suffer from this disorder ($M=22.38$; $SD=7.61$ for mothers and $M=28.85$; $SD=10.76$ for fathers). High *Cohen's d* value indicates a strong association between the level of inconsequence in caregiver behavior and later development of PTSD.

Hypothesis no. 2

An analysis was performed to test the hypothesis that parental attitude characterized by inconsequence has an influence on the level of dissociation. Linear regression was performed and on the basis of regression coefficients it was stated that inconsequent father's attitude is a significant predictor ($\beta=0.32$; $p=0.02$) for the elevated levels of dissociative tendencies. Standardized coefficient beta indicates that with the growing level of inconsequence in parent's behavior the level of dissociation grows

accordingly. Proposed model turned out to fit the data well $F(1, 54) = 6.36; p = 0.02$ and it explains 11% of the variation of the dependent variable ($R^2 = 0.11$). A regression equation can be stated as follows:

$$Y = 39.42 \times 0.47 \times X_{\text{father's level of inconsequence}}$$

Table 1. Regression coefficients for the dependent variable: father's level of inconsequence

Model	Coefficients			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error			
(Constant)	39.419	6,081		6.483	.000
inconsequence	.465	.184	.324	2.521	.015

a. dependent variable: dissociation level.

A second linear regression analysis was performed with a dependent variable of mother's inconsequence level. The model fits well the data $F(1, 54) = 9.02; p = 0.004$. The selected predictor allows for the significant estimation of the dissociation level ($\beta = 0.38; p = 0.04$). On the basis of the standardized regression coefficient (presented in the table below) it can be assumed that people whose mothers' behavior was marked by high inconsistency would show stronger dissociative tendencies. This model accounts for 14% of variance in the dependent variable ($R^2 = 0.14$) and it can be stated as:

$$Y = 40.46 \times .57 \times X_{\text{mother's level of inconsequence}}$$

Table 2. Regression coefficients for the dependent variable: mother's level of inconsequence

Model	Coefficients			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error			
(Constant)	40.460	4.886		8.280	.000
inconsequence	.569	.189	.378	3.003	.004

a. dependent variable: dissociation level.

Hypothesis no. 3

Another analysis was performed to check whether posing excessive demands would be a reliable predictor for later raised level of alexithymia. It turned out that 17% of variance in alexithymia score can be explained by father's attitude characterized by exceedingly high demands ($R^2 = 0.17$). People who were raised by inappropriately demanding fathers ($\beta = 0.42; p = 0.001$) had notably higher alexithymia levels than those who reported having fathers with adequate demands. This model is statistically significant and the regression equation can be stated as:

$$Y = 47.08 \times 0.46 \times X_{\text{father's demands}}$$

Table 3. Regression coefficients for the dependent variable: father's demands

Model	Coefficients			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error			
(Constant)	47.080	4.628		10.173	.000
demands	.459	.135	.417	3.398	.001

a. dependent variable: level of alexithymia.

Last analysis was performed with *mother's level of demands* as a predictor for alexithymia. The test demonstrated that this model fits well the data $F(1, 55) = 13.35; p = 0.001$. The selected predictor allows for the significant estimation of the alexithymia level ($\beta = 0.44; p = 0.001$). On the basis of the standardized regression coefficient (presented in the table below) it can be assumed that people whose mothers behavior was marked by high level of demands would show stronger alexithymic tendencies. This model accounts for 20% of variance in the dependent variable ($R^2 = 0.2$) and it can be stated as:

$$Y = 47.56 \times 0.53 \times X_{\text{mother's demands}}$$

Table 4. Regression coefficients for the dependent variable: mother's demands

Model	Coefficients			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error			
(Constant)	47.560	4.206		11.308	.000
demands	.532	.146	.442	3.654	.001

a. dependent variable: level of alexithymia.

Hypothesis no. 4

A t-test for independent samples was conducted and it showed that in case of traumatic events caused by friends or family the dissociation levels are considerably higher ($M=73.46$; $SD=24.84$) than in those situations in which such occurrences are perpetrated by people unknown to the victim ($M=54.92$; $SD=14.83$). This difference turned out to be significant: $t(24)=-2.31$; $p=0.03$ and *Cohen's d* value (-0.90) indicates a strong connection between the identity of the perpetrator and dissociation level.

Discussion

The research findings indicate that parental (both maternal & paternal) behavior is a significant predictor of alexithymia. Emotional expression patterns of parents such as blunted, inconsistent, aversive, and indifference to the emotional communication of young children lead them to become insecurely attached and unable to develop the full capacity for emotional communication. These parental responses toward children's expression of emotions, can affect children's understanding of emotion, style of emotional expression and their ability to regulate emotion. When children fail to understand and express their emotions, alexithymia and dissociation may develop. It was assumed that parental attitudes marked by excessive demands are predictors for elevated levels of alexithymia; also, those that are characterized by inconsequence should influence noticeably dissociative tendencies. Both of the assumptions were supported and, what is even more important, the influence of mother's attitudes (i.e. level of demands and inconsequence) was almost equally important as father's approach (there exists a 2–3% difference in variance accounted for by those models) in case of alexithymia as well as dissociative tendencies. This is quite contrary to the usual tendency to strongly emphasize the role of a primary caregiver – that is, in most cases – mother of an infant. Maybe, in the light of these results (especially nowadays, when father's position in the family changes very rapidly), broadly accepted assumptions should be reconsidered.

The comparisons between the groups of people with PTSD symptoms and those that did not meet the criteria required for the diagnosis of this disorder furnish us with more data that can aid us in understanding the role of early attachment for later development of personal resources. As was predicted, a sense of insecurity raised by contradictory signals and unpredictable parental behaviors deprive growing individual of the tools needed to protect oneself from harm, to endure difficulties and tend to injuries if such a need arises.

Further findings related to the connection between the identity of a perpetrator of the trauma and a tendency to dissociate. The results are in full accordance with theories of Freyd et al. (2001), Liotti (2004) and Schauer et al. (2008): it turned out that dissociation levels are significantly higher among people who suffered abuse from hands of their friends or relatives than those who were harmed by strangers. As Freyd et al. (2001) argues, dissociation can

be perceived as a mechanism that defends not only an individual but also those that he or she holds dear, even in the face of undeniable and condemning facts. It is a learned technique, which prevents the severing of emotional bonds, sometimes at cost of losing psychological integrity.

In the light of our findings and other related empirical evidences which described alexithymia and dissociation in terms of early childhood experiences, particularly focused on parenting, it can be concluded that parental behavior during childhood is an important and crucial factor in the development of alexithymia and dissociation in later adult life.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.), Washington, DC: American Psychiatric Publishing.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, Text revision. Washington D.C: American Psychiatric Press Inc;
- Badura, A. S. (2003). Theoretical and empirical exploration of the similarities between emotional numbing in posttraumatic stress disorder and alexithymia. *Anxiety Disorders, 17*, 349–360.
- Bowlby, J. (1982). *Attachment and loss*. Vol.1: *Attachment (2nd edition)*. London: Hogarth Press.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock Publications.
- Bowlby, J. (1978). Wypowiedź druga. In: R. Zazzo, *Przywiązanie. Ujęcie interdyscyplinarne* (pp. 142–156). Warszawa. PWN.
- Bowlby, J. (1969). *Attachment and Loss*, Vol. I: *Attachment*. London: Hogarth Press.
- Cloitre, M., Scarvalone, P., & Difede, J. (1997). Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress, 10*, 437–452.
- Dragan, M., Lis-Turlejska, M., Popiel, A., Szumił, Sz., & Dragan, W. (2012). The validation of the Polish version of the Posttraumatic Diagnostic Scale and its factor structure. *European Journal of Psychotraumatology, 3*(1), 18479, doi: 10.3402/ejpt.v3i0.18479
- Fonagy, P., Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology, 21*(4), 1355–1381.
- Frewen, P. A., Dozois, D. J. A., Lanius, R. A., & Neufeld, R. W. J. (2008). Meta-analysis of alexithymia in posttraumatic stress disorder. *Journal of Traumatic Stress, 21*, 243–246.
- Freyd, J. J., DePrince, A. P., & Zurbriggen, E. L. (2001). Self-reported memory for abuse depends upon victim-perpetrator relationship. *Journal of Trauma & Dissociation, 2*, 5–17.
- Foa, E. B. (1995). *Posttraumatic Diagnostic Scale (PDS) manual*. Minneapolis, MN: NSC Pearson.
- Fukunishi, I., Sasaki, K., Chishima, Y., Anze, M., & Saijo, M. (1996). Emotional disturbances in trauma patients during the rehabilitation phase: Studies of posttraumatic stress disorder and alexithymia. *General Hospital Psychiatry, 18*, 121–127.
- Goldberg, L. (1999). The Curious Experiences Survey, a revised version of the Dissociative Experiences Scale: Factor structure, reliability and relations to demographic and personality variables. *Psychological Assessment, 11*(2), 134–145. American Psychological Association.
- Hesse, E., & Main, M. (2000). Disorganized infant, child, and adult attachment: Collapse in the behavioral and attentional strategies. *Journal of the American Psychoanalytic Association, 48*, 1097–1127.
- Hyer, L., Woods, G., Summers, M. N., Boudswyns, P., & Harrison, W. R. (1990). Alexithymia among Vietnam veterans with posttraumatic stress disorder. *Journal of Clinical Psychiatry, 51*, 243–247.
- Karpman, S. (1968). Fairy tales and script drama analysis. *Transactional Analysis Bulletin, 7*, 39–43.
- Lane, R. D., Ahern, G. L., Schwartz, G. E., & Kaszniak, A. W. (1997). Is alexithymia the emotional equivalent of blindsight? *Biological Psychiatry, 42*, 834–844, 39–43.

- Liotti, G. (2004). Trauma, dissociation and disorganized attachment: three strands of a single braid. *Psychotherapy: Theory, research, practice, training, 41*, 472–486.
- Litz, B. T., Orsillo, S. M., Kaloupek, D., & Weathers, F. (2000). Emotional processing in posttraumatic stress disorder. *Journal of Abnormal Psychology, 109*, 26–39.
- Lyons-Ruth, K., & Jacobvitz, D. (1999). Attachment disorganization: Unresolved loss, relational violence and lapses in behavioral and attentional strategies. In: J. Cassidy & P. R. Shaver (eds.) *Handbook of attachment*. New York: Guilford Press (pp. 520–554).
- Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In: M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 161–182). Chicago: University of Chicago Press.
- Maruszewski, T., & Ścigała, E. (1998). *Emocje – Aleksytymia – Poznanie*. Poznań: Wydawnictwo Fundacji Humaniora.
- Messina, A., Beadle, J. N., & Paradiso, S. (2014). Towards a classification of alexithymia: Primary, secondary and organic. *Journal of Psychopathology, 20*(1), 38–49.
- Monson, C. M., Price, J. L., Rodriguez, B. F., Ripley, M. P., & Warner, R. A. (2004). Emotional deficits in military-related PTSD: An investigation of content and process disturbances. *Journal of Traumatic Stress, 17*, 275–279.
- Pietromonaco, P. R., & Feldman Barrett, L. (2000). The Internal Working Models Concept: What Do We Really Know About the Self in Relation to Others? *Review of General Psychology, 4*(2), 155–175.
- Plopa, M. (2008). *Skala Postaw Rodzicielskich*. Warszawa: Vizja Press & It.
- Putnam, F. W. (1991). Dissociative disorders in children and adolescents: developmental perspective. *Psychiatric Clinics of North America, 14*, 519–531.
- Putnam, F.W. (1992). Are Alter Personalities Fragments or Pigments? *Journal of Psychoanalytic Inquiry, 12*, 95–111.
- Salter, A. C. (2003). *Pokonywanie traumy. Jak zrozumieć i leczyć dorosłe ofiary wykorzystywania seksualnego w dzieciństwie*. Poznań: Media Rodzina.
- Schauer, M., & Elbert, T. (2008). Psychophysiology of the defense cascade – Implications for the treatment of posttraumatic stress disorder (PTSD) and dissociative disorders, Invited Lecture. Society for Applied Neuroscience, Biennial SAN Conference, Seville.
- Schore, A. N. (2001). The effects of early relational trauma on right brain development, affect regulation and infant mental health. *Infant Mental Health Journal, 22*, 201–269.
- Sifneos, P. E. (1991). Affect, emotional conflict, and deficit: An overview. *Psychotherapy and Psychosomatics, 56*(3), 116–122.
- Søndergaard, H. P., & Theorell, T. (2004). Alexithymia, emotions and PTSD: Findings from a longitudinal study of refugees. *Nordic Journal of Psychiatry, 53*, 185–191.
- Taylor, G. J., Bagby, R. M., & Parker, J. D. A. (1991). The alexithymia construct. A potential paradigm for psychosomatic medicine. *Psychosomatics, 32*(2), 153–164.
- Weiskrantz, L. (1986). *Blindsight: a case study and its implications*. Oxford: Clarendon Press.
- Yehuda, R., Steiner, A., Kahana, B., Binder-Brynes, K., Southwick, S., M., Zelman, S., et al. (1997). Alexithymia in Holocaust survivors with and without PTSD. *Journal of Traumatic Stress, 10*, 93–100.
- Zlotnick, C., Mattia, J. I., & Zimmerman, M. (2001). The relationship between posttraumatic stress disorder, childhood trauma and alexithymia in an outpatient sample. *Journal of Traumatic Stress, 14*, 177–188.
- Zdankiewicz-Ścigała, E. (2017). *Aleksytymia i dysocjacja jako podstawowe czynniki zjawisk potraumatycznych (Alexithymia and dissociation as basic factors of posttraumatic disorder)*. Warszawa: Wydawnictwo Scholar.
- Zdankiewicz-Ścigała, E., Ścigała, D. K., & Borowska, A. (in preparation). The validation of the Polish version of the Curious Experiences Survey and its factor structure.
- Zazzo, R. (1978). Przywiązanie. In: R. Zazzo, *Przywiązanie. Ujęcie interdyscyplinarne* (pp. 27–65). Warszawa: PWN.