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ORIGINAL ARTICLE

Fluctuations of mentalization in the context of relational stimuli and representational contents

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BACKGROUND
Mentalization as the ability to interpret human behavior in terms of mental states is not a stable characteristic but is subject to fluctuation depending on the context. Nonlinear system theories explain the fluctuation of mentalization by stressing the context of the relationship in which there emerges a new quality of mentalization and/or activation of elements of the internal system of representations.

PARTICIPANTS AND PROCEDURE
The aim of the study was to test whether the fluctuation of mentalization depends on the type of relational stimulus (imagining the responsiveness/unresponsiveness of a significant other) or on the interaction of the stimulus with the content aspects of representation (a predominance of relatedness/sociotropy or a predominance of self-definition/autonomy). The investigators collected the utterances of 49 students about a situation involving a significant other, which was preceded by a request to imagine that this person was responsive (Condition 1) or unresponsive (Condition 2). The level of mentalization was assessed by means of the Metacognition Assessment Scale. The investigators divided the group into two subgroups with different configurations of representational contents (a predominance of relatedness/sociotropy or self-definition/autonomy) based on the scores in the Personal Style Inventory.

RESULTS
Mentalization fluctuations dependent on the interaction of the stimulus and representational contents were observed in the group with a predominance of sociotropic contents for interpersonal mentalization but not for self-reflective mentalizing.

CONCLUSIONS
Mentalization must not be decontextualized; however, it is not the stimulus alone but the interaction of the stimulus with representational content that determines the fluctuations of mentalization. Individuals with a predominance of relatedness experience a decline in the capacity for interpersonal mentalization after imagining a significant other's unresponsiveness, which can be interpreted as resulting from a weakening of the function of differentiating.

KEY WORDS
fluctuations of mentalization; sociotropy; representation; relational stimuli

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BACKGROUND

Mentalization is a process of social cognition consisting in interpreting one's own and other people's behavior in terms of intentional mental states (e.g., needs, desires, feelings, beliefs, goals; Allen, Fonagy, & Bateman, 2008). As the process of focusing on mental states, mentalization is a very broad and multidimensional phenomenon (Brown, 2008; Choi-Kain & Gunderson, 2008) comprising several important components: representing mental states, tolerating them without the necessity of applying defensive measures, making inferences on their basis, and regulating the behavior stemming from these mental states (Beaulieu-Pelletier, Bouchard, & Philippe, 2013; Bouchard et al., 2008; Fonagy, Bateman, & Luyten, 2012). Currently, there are many conceptualizations of mentalization, not only referring to the processes of inference about mental states, but also stressing the regulatory role of mentalization (Carcione et al., 2010; Dimaggio et al., 2009; Dimaggio & Lysaker, 2015). These concepts are accompanied by many different methods of studying the mentalization construct (the review in Marszał, 2016, this issue). The substratum of mentalization is intrapsychic structures (Bouchard et al., 2008), which reveal their formal and substantive characteristics in the course of mentalizing; the more mature the representations during the process of mentalizing (e.g., integrated and diverse self and object representations; Kernberg, 2016; internal working models based on secure attachment; Bartholomew & Horowitz, 1991), the more mature is the mentalization.

DIMENSIONS OF MENTALIZATION DYNAMICS

Although mentalization is usually perceived as a relatively stable characteristic (Luyten & Fonagy, 2014), there is no doubt that the capacity to mentalize may change over time and across situations, which is observed in everyday life (Fonagy et al., 2010), in empirical studies (Marszał, 2015), and in the process of psychotherapy (Fischer-Kern et al., 2015; Hörz-Sagstetter, Mertens, Isphording, Buchheim, & Taubner, 2015). These changes may be dramatic or gradual; individuals with a good capacity to mentalize may selectively choose not to use this function in some situations, and people with a severely limited ability to adopt an alternative perspective may sometimes gain significant insight into other people's states of mind (Sperry, 2013). Taking into account all possible manifestations of mentalization dynamics, it is possible to consider this changeability in terms of two dimensions: the permanence of changes and the direction of changes (Figure 1). The first dimension – permanence – comprises, on the one hand, the momentary, sudden, and short-term fluctuations triggered by the situational context, usually a breakdown in mentalization caused by an actual or imaginary stimulus, and on the other hand more permanent or long-term changes, starting suddenly or gradually. The second dimension is the direction of changes in mentalization – progressive or regressive, i.e., whether mentalization changes for the better or is it getting worse or disappearing.

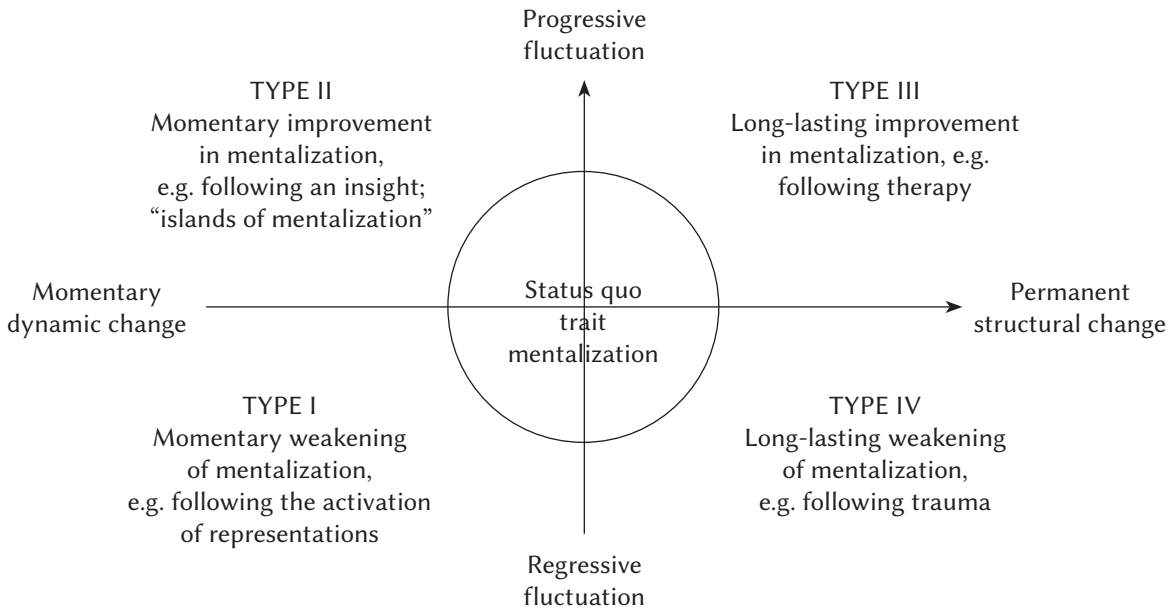

Figure 1. Types of mentalization changes in the context of the permanence and direction dimensions. The author's compilation.

Plotting these two dimensions against each other yields four types of changes in the level of mentalization at a given moment. The first type is contextually determined regressive fluctuations, which Fonagy describes as follows: "(…) any anomalies in mentalizing capacity are unlikely to be manifest in patients with BPD unless the relationship in which mentalization is being observed 'pulls' for the activation of these areas" (Fonagy et al., 2010, p. 73). These momentary fluctuations caused by a situational stimulus may also happen in the process of psychotherapy, for example when the patient is unwilling to disclose certain contents or reacts defensively to them (Hörz-Sagstetter et al., 2015). The second type is short-term progressive changes, such as an individual insight in the course of psychotherapy, which is not maintained for a long time, or "islands" of normal mentalization appearing in a disordered person in a relationship with another person (Sperry, 2013). The lability of mentalization visible in this case shows much more resemblance to a context-dependent state than to a trait resistant to situational influences. The third type is permanent progressive changes in mentalization, usually observed in psychotherapy and in longitudinal studies (Fischer-Kern et al., 2015; Levy et al., 2006; Rudden, Milrod, Target, Ackerman, & Graf, 2006). Finally, the fourth type refers to persistent, long-term changes "for the worse", exemplified by serious and prolonged deficits in mentalization following extreme trauma (Varvin & Rosenbaum, 2003). In the central region of the diagram plotting permanence vs. progression and regression of mentalization lies the zone of status quo – no change in mentalization, where the capacity to mentalize at a given moment can be described as a trait and is not subject to momentary or lasting changes induced by contextual stimuli. This model refers to the dynamics of mentalization in a given time segment, which means that the same person may sometimes experience sudden fluctuations in mentalization, and at other times mentalization may function as a trait, e.g. people with a borderline disorder may generally mentalize well, but at the moment of emotional arousal, this ability violently breaks down (Fonagy et al., 2010).

MENTALIZATION AND ATTACHMENT AS A STATE – SYSTEMIC EXPLANATION

Although this changeability of mentalization is undeniably observed by researchers and practitioners, it still has not been sufficiently explained; this refers particularly to momentary fluctuations. Simple linear models, in which a permanent deficit in mentalization reflects a halt of its development, have become insufficient to understand the trans-situational dynamics of mentalization, and conceptions rooted in psychoanalysis have begun to be more open to nonlinear dynamic systems theory (Tyson, 2006). Two distinct systemic approaches to mentalization have been proposed to account for its fluctuations. The first one – the intersubjective process systemic approach: psychoanalytic complexity theory (Sperry, 2013) – is based on assumptions similar to those of the systemic paradigm in psychology (Goldenberg & Goldenberg, 2008). In this approach, it is assumed that mentalization is not merely a function of a person's internal abilities but emerges in the course of interactions with others, reflecting the potential of the whole dynamic self-organizing "mentalizing system". Although to some extent the internal determinants of mentalization are taken into account, much stronger emphasis is placed on the process of the emergence of this capacity in relations; consequently, no predetermined plan or developmental sequence is acknowledged by which a system self-organizes; there is no assumption, either, that "that there is a 'before' to intersubjectively sustained mentalization" (Harris, 2013, p. 701).

The second systemic proposal is focused not so much on the fluctuation of mentalization (Chefetz, 2013) as on explaining the changeability of attachment. In this case, the term "system" does not refer to the interpersonal process system but to the intrapsychic structure system – one person's mind is treated as a system (Pervin, 2001) of various, more or less integrated, self and object representations (e.g., the self-object dyad; Kernberg, 2016), internal working models of others (Bartholomew & Horowitz, 1991), which are selectively activated by relational stimuli (Cierpiałkowska, Górska, Soroko, & Marszał, 2017; Górska & Cierpiałkowska, 2016). Chefetz (2013) explains mentalization fluctuations by referring to the mechanism of the activation of old affect scripts as well as self-states (dissociated and unconscious, but having an effect on functioning). Fonagy (Fonagy et al., 2010) describes the activation of the less mature prementalistic modes (which do not disappear in the course of development but remain latent in normal functioning) or switching from controlled to automatic mentalization. This approach is close to contemporary attachment theories, explaining not only the style but also the state of attachment. There are reasons to explain the dynamics of mentalization understood as a state in a similar way – especially as mentalization and attachment (including mental representations of self and other) are closely interrelated. For a long time now, attachment has been treated as a trait stable only to some extent; its stability index in measurements of attachment repeated after an interval ranging between two weeks and two years ranges from .50 to .70 (Zhang & Labouvie-Vief, 2004). This gave rise to conceptualizations of the state of context-dependent attachment (Fraley, 2002). Abundant empirical evidence confirms the fluctuations of attachment both over short stretches of time (Bos-

mans, Van de Walle, Goossens, & Ceulemans, 2014) and over several years (Crowell, Treboux, & Waters, 2002; Zhang & Labouvie-Vief, 2004). The instability of attachment style may stem from critical life events, such as marriage (Crowell et al., 2002), split-up, or entering into an intimate relationship (Kirkpatrick & Hazan, 1994). A momentary decrease in the level of secure attachment (understood as a state) is caused by various contextual factors, such as relational conflict (Bosmans et al., 2014) or an experience of interpersonal loss (emotional support, intimacy, or trust) (Davila & Sargent, 2003). Attachment fluctuations are observed also in the research procedure, when participants are asked to recall states in which they felt secure, anxious, or avoidant (Rowe & Carnelley, 2003), or when various types of priming are used to activate different specific contexts of attachment (e.g., a request to imagine a responsive partner or an insensitive one; Gillath & Shaver, 2007).

Changes in attachment style are explained by the hierarchical model of attachment, based on cognitive models of the mind, which postulates the simultaneous presence of several hierarchically organized models of self and other in the mind (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Fraley & Shaver, 2000; Pierce & Lydon, 2001). At higher levels of organization, these models contain abstract generalized rules or assumptions concerning the attachment relationship, while at lower levels they contain information about specific relationships and events (Overall, Fletcher, & Friesen, 2003). Each of these models may be activated, in which case its content becomes more accessible. The current level of anxiety, avoidance, and security is a function of the model that has been the most strongly activated. While momentary fluctuations of attachment reflect the fluctuations in the accessibility of representations, more permanent changes indicate a deeper transformation of the schemas (Zhang & Labouvie-Vief, 2004). Thinking of the systemic model of mentalization based on the above principles, it is possible to seek the causes of its fluctuation in the activation of different self and object models (representations) than usual, ones that are normally latent and are marked by a different level of integration, differentiation, maturity, dissociation, or secure attachment.

Although it is difficult to resolve at present which systemic model explaining the changeability of mentalization – intersubjective or intrapsychic – is more accurate and whether these models are competing or complementary (Chefetz, 2013), one thing is certain: mentalization cannot be decontextualized. When it turned out that mentalization exhibits characteristics of trans-situational changeability, what acquired great significance were contextual factors – mainly interpersonal relations, which trigger momentary changes in mentalization. The intersubjective process model, in which the fluctuation of mentalization stems from the emergence of a new quality in the relationship of two people (Sperry, 2013), assumes that the relational context contributes to (weakens or enhances) mentalization, whose level and fluctuations result from the functioning of the system. The intrapsychic structure model treats the relational context as a factor activating the previously present aspects of intrapsychic structures (e.g., prementalistic modes in Fonagy's conception or old affect scripts activated in the model described by Chefetz).

On the other hand, apart from the significance of the relational context, what should not be overlooked is the role of internal structures that the relational stimulus encounters (Chefetz, 2013). Thus, the fluctuation of mentalization is a function of both the stimulus and the structure – a function of external interpersonal relations and internal representations in which "internal relations" are stored, being ideas of oneself and others in relations. The representation of a relationship (an element of the whole system of representations) becomes active when a relational situation involves stimuli corresponding to the representational content. In other words, if the contents of a representation include elements sensitive to certain relational stimuli, their emergence in a certain context results in the person processing information consistently with the contents of the activated representation.

TWO TYPES OF REPRESENTATIONAL CONTENT AND THEIR INFLUENCE ON MENTALIZATION DYNAMICS

One of the conceptions – in fact, "metaconceptions" – which describes the contents of two universal types of representations and their manifestations is the theory of two personality dimensions, proposed by Blatt and Luyten (Blatt, 2008; Luyten & Blatt, 2011, 2013, 2016). Using many two-polarity models of personality, Blatt and Luyten presented the assumptions concerning two universal dimensions in normal and disordered personality – relatedness and self-definition. Relatedness refers to reciprocal, meaningful, and personally satisfying interpersonal relationships. Self-definition, by contrast, refers to a coherent, realistic, differentiated, and essentially positive sense of self. These two dimensions of personality are present in many theories explaining the patterns of functioning both at the level of internal structures (representations) and at the level of manifested patterns of behavior; the most important ones include Beck's cognitive model of personality and Bowlby's (1969) attachment theory. Beck (1983) describes two poles of experience at the level of behavior patterns – sociotropy and autonomy. Sociotropy involves investment in and attachment to others, while autonomy refers to an achievement-oriented

personality style associated with attempts to maximize control over the environment. The modern cognitive approach postulates that what underlies the extreme forms of sociotropy and autonomy are two types of maladaptive core beliefs: in "being unworthy of love" for the sociotropic personality and in "helplessness" for the autonomous personality (Beck, 2005). Both dimensions – relatedness and self-definition – are also present in Bowlby's (1969) attachment theory. Relatedness corresponds to attachment anxiety exhibited by individuals who are afraid of being abandoned by others and exaggerate the need for other people's protection and the need to maintain intimate relationships (Mikulincer & Shaver, 2007). Self-definition corresponds to attachment avoidance; individuals exhibiting this type of attachment experience discomfort in connection with intimacy and dependence on others and overrate the need for autonomy and distance from others (Mikulincer & Shaver, 2007). According to Luyten and Blatt (2013), mental health consists in the balance of the two dimensions, with investment both in relationships and in oneself; the greater the predominance of one of them is, combined with a deficit in the other, the higher is the likelihood of building pathological defensive constellations. Consequently, excessive relatedness is associated with separation anxiety, anxious attachment, internalizing behavior, or the anaclitic type of psychopathology, while extreme self-definition involves avoidant attachment, externalizing behaviors, and introjective types of disorders (Blatt, 2008; Luyten & Blatt, 2013). Individuals with different configurations of the relatedness/sociotropy and self-definition/autonomy personality dimensions differ in terms of representational contents (Blatt, 2008). People with a predominance of relatedness have an image of themselves as needing support and dependent on others; they are prone to separation anxiety and abandonment themes. By contrast, people with a predominance of autonomy have an image of themselves as independent, controlling, and dominant; they are distanced from others and prone to engulfment anxiety.

HYPOTHESES AND AIMS

The above review reveals that mentalization should not be treated only as a trait and that the changing dynamics of mentalization is a reason to consider it as a state. System theories highlight the role of the relational context as responsible for the changeability of mentalization. However, it is not relational stimuli alone but also internal relations stored in intrapsychic structures that are significant to fluctuations in the level of mentalization. In the present study, I tested the hypothesis concerning the significance of relational stimuli and the content of intrapsychic structures for the fluctuations of mentalization using the theory of two personality dimensions as defining representational contents. It was hypothesized that the level of mentalization assessed based on an utterance about an event involving a significant other would change depending on the type of stimulus and the configuration of representational contents – with a predominance of relatedness/sociotropy or with a predominance of self-definition/autonomy. In the study, I manipulated the type of relational stimulus corresponding with the content of the relatedness dimension – namely, the instruction requesting the participants to imagine the responsiveness or unresponsiveness of a significant other (Gillath & Shaver, 2007). The presented study focused on momentary (regressive and/or progressive) changes in mentalization, manifesting themselves under the influence of the stimulus applied in the study, rather than permanent changes attained through the influence of long-lasting relationships or strong stimuli. The aim was to observe the activation of the existing representations – the change in their accessibility caused by the stimulus – rather than change in the structures. Then, the aim of the study was to check if fluctuations in the level of mentalization occurred in the repeated measurement procedure, and, if so, what they depended on: the type of stimuli in the two study conditions or their interaction with the contents of representations in two groups with different configurations of sociotropy and autonomy.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

The study was part of a larger project devoted to mentalization processes (Górska, 2015). The participants were first-year students in fields other than psychology, who gave informed consent to take part in a study of emotions in interpersonal relations. After the completion of the whole procedure, the students were debriefed and received extra ECTS credits for one of the courses. Of the 50 individuals who reported for participation in the study, one did not complete some of the measures, and so finally the sample consisted of 49 participants: 40 women and 9 men, aged $M = 19.30$ ($SD = 0.73$).

MEASURES

The following instruments were used in the study:

The *Metacognition Assessment Scale – Revised* (MAS-R; Carcione et al., 2010), adapted into Polish by Marszał (2015) – a system in which competent judges code utterances in order to assess the level of metacognition manifesting itself in narratives. Com-

petent judges use a six-point scale (from 0 to 5) to rate the levels of recognition of both one's own and other people's mental states as well as the ability to use the knowledge about mental states for regulatory purposes. The level of mentalization was assessed as 0 when the skill was not evident in the unit, 1 point could be obtained for scarce mentalization (sporadic, poorly articulated, not spontaneous), and 5 for sophisticated mentalization: sustained talk about mental states, descriptions are rich, talk of mental states is spontaneous or there is an autonomous elaboration of a question or a suggestion. The scale comprises three subscales, each of them consisting of partial components. The first subscale, Understanding One's Own Mind, refers to the self-reflective context and encompasses the following: *Monitoring* one's own mental states (the ability to identify cognitive and emotional states and to describe the relations between mental states), *Differentiation* (the ability to discriminate between subjectivity and reality), and *Integration* (the ability to create a complex and multidimensional picture of oneself in a coherent narrative). There are some examples of narration assessed in this subscale: "When someone looks at me, I get really embarrassed and tremble" or "I had a terrible dream in which I fainted. When I woke up, I still had this fear of falling down senseless. Then I realised I was awake and that it had just been a bad dream" (Carcione et al., 2010). The second subscale, Understanding Others' Minds, refers to mentalization in the interpersonal context, and consists of two components: *Monitoring other people's mental states* (the ability to identify other people's mental states and to describe the relations between them) and *Decentration* (the ability to describe other people's mental states and actions as independent of one's own viewpoint or engagement in the relationship). There are some examples of narration assessed in this subscale: "He doesn't think he deserves a raise" or "When he argues with his wife, he becomes impossible to deal with and would like to get away". The last, third subscale, *Mastery*, refers to the use of knowledge about mental states for regulatory purposes, e.g. "I was in my car and a nasty-looking individual cut in on me. I was getting angry and it could have ended badly but I said to myself 'Forget it!' and went on my way" (Carcione et al., 2010). Initially, the scale was meant to measure mentalization changes during psychotherapy; currently, it is used in the assessment of narratives in various populations (Dimaggio et al., 2008; Lysaker et al., 2005). A team of seven competent judges participated in a training procedure in assessing narrations for over a year (Marszał, 2015). Two judges, whose assessments revealed the highest agreement, rated the level of mentalization in two utterances produced by each participant, without having the information about which study condition the utterances had been generated in. Interrater agreement in the present study, measured as the interclass correlation coefficient (ICC), ranged from $\alpha = .70$ to $\alpha = .89$.

The *Personal Style Inventory* (PSI; Robins et al., 1994) is a revised version of the scale proposed for measuring the level of sociotropy and autonomy by Beck (Sociotropy and Autonomy Scale, SAS; Beck, 1983), intended to measure the level of concern with relations (sociotropy) and autonomous achievement (autonomy). The scale consists of 48 items grouped into three Sociotropy subscales: Dependency (e.g. "I find it difficult to be separated from people I love"), Concern About What Others Think (e.g. "I am easily persuaded by others"), and Pleasing Others (e.g. "I often put other people's needs before my own", and three Autonomy subscales: Self-Critical Perfectionism (e.g. "It bothers me when I feel that I am only average and ordinary"), Need for Control (e.g. "I am easily bothered by other people making demands of me"), and Defensive Separation (e.g. "I don't like people to invade my privacy"). I used the Polish version translated by a clinical psychologist and a translator familiar with the field of psychology. The reliability (Cronbach's α) was .90 for the Sociotropy scale and .77 for the Autonomy scale. In the present study, this measure served to distinguish groups with different configurations of representational contents – a predominance of sociotropy or autonomy.

Experiences in Close Relationships – Relationship Structures (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011), consisting of 36 items, is a self-report method designed to assess attachment in various relational contexts (in the relationship with mother, father, partner, and friend). For each relationship, nine items describe the level of anxiety and avoidance to be rated on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Six items in each domain refer to the level of anxiety and three refer to the level of avoidance. It is also possible to compute global, noncontextual indices of anxiety and avoidance. In the present study, I used the version that had undergone a preliminary adaptation procedure (Marszał, 2015), with Cronbach's α reliability ranging from .70 to .93. The investigators administered this instrument in order to choose two figures whose imaginary representations were used as contextual stimuli in the two study conditions: responsiveness and unresponsiveness of a significant other.

PROCEDURE

The study consisted of two stages and was conducted on an individual basis, with a three- to four-week interval, in accordance with the same procedure: (1) completing the questionnaires, (2) relational contextual stimulus (request to imagine the responsive-

ness or unresponsiveness of a significant other) and a short descriptive task, (3) generating a narrative about a situation involving a given person – as the basis for assessing the level of mentalization. In the first stage, the participants completed the ECR-RS questionnaire (Fraley et al., 2011). Then, based on the ECR-RS score, of the four attachment figures (mother, father, partner, friend), the investigators identified the one to whom the participant exhibited the most secure attachment (the lowest scores on anxiety and avoidance). Next, the participant was asked to imagine and write down the thoughts and feelings connected with the attachment figure in a situation of his or her responsiveness (Condition 1). The instruction applied in this case was taken from the study by Marszał (2015) and is a modified version of the instruction used in different studies (Collins & Gillath, 2012; Sutin & Gillath, 2009). The next part of the first stage consisted in generating an utterance, which was subsequently analyzed by competent judges in terms of mentalization level. Each participant was asked to make an utterance about a difficult situation that he or she had been involved in which happened between the participant and the person he or she had written a text about in the previous task. The participant was encouraged to say how a given situation started, how it proceeded, how it ended, and how he or she currently perceived it. The utterance was recorded and transcribed. In the second stage, the participants completed a set of questionnaires including the PSI (Robins et al., 1994) measuring sociotropy and autonomy, which – as in the first stage – was immediately followed by induction (a contextual stimulus); this time, the participant was asked to spend a few minutes writing down the thoughts and feelings concerning the unresponsiveness of the attachment figure with regard to whom he or she exhibited the highest level of anxiety and avoidance (Condition 2). Again, as in the first stage, the participants were asked to speak about a difficult situation involving the person that they had previously written a text about. The speech was recorded and subsequently transcribed, and it constituted the material for the assessment of mentalization in the second study condition. After the study, the participants were debriefed.

RESULTS

MENTALIZATION DEPENDENT ON OBJECT REPRESENTATION RESPONSIVENESS

In order to determine whether the level of mentalization depends on the type of stimulus (imagining the responsiveness or unresponsiveness of a significant other), I compared the scores on MAS dimensions in the first and second conditions in the total sample. No intraindividual differences were found in mentalization level in any of the MAS dimensions, including self-reflective mentalization, interpersonal mentalization, and mastery ($p > .05$), which means that mentalization fluctuation dependent on stimulus type did not occur.

MENTALIZATION DEPENDENT ON INTERACTION OF OBJECT REPRESENTATION RESPONSIVENESS AND DOMINATION RELATEDNESS VS. SELF-DEFINITION

In the next step, I determined whether the level of mentalization depended on the interaction of stimulus type and the dominant configuration of personality dimensions – relatedness versus self-definition. I divided the total sample into two subgroups, with the absolute difference between scores on the Autonomy and Sociotropy scales as the criterion of division. Thus, 25 participants were classified in the group with a predominance of sociotropy, and 24 participants in the group with a predominance of autonomy. The level of sociotropy in the first group was $M = 91.24$ ($SD = 8.75$), and the level of autonomy was $M = 70.48$ ($SD = 11.27$), while in the second group the sociotropy level was $M = 66.75$ ($SD = 8.03$) and the autonomy level was $M = 81.38$ ($SD = 6.90$); the two groups differed significantly from each other in the levels of sociotropy ($z = -5.81$, $p < .001$) and autonomy ($z = -3.52$, $p < .001$).

INTRAGROUP COMPARISONS

Due to the lack of normal distribution of variables, in order to assess the dependence of mentalization fluctuations on the interaction of study condition (stimulus type) and group, I performed a number of intragroup comparisons (comparison of mentalization level in conditions 1 and 2 in both groups separately) using the Wilcoxon test and intergroup comparisons using the Mann-Whitney test. In this case the results of intragroup comparisons revealed no dynamics of self-reflective and mastery, either, but the study showed significant differences in the level of interpersonal mentalization depending on stimulus type in the group with a predominance of sociotropy (Table 1). The levels of both components of interpersonal mentalization – *monitoring other people's mental states* and *decentration* – were found to be significantly lower in this group in the context of imagining the object's unresponsiveness than in the first study condition (imagining the object's responsiveness). Such differences were not found in the second group, where the configuration with a predominance of autonomy was prevalent.

Table 1

Descriptive statistics for the variables in the two study conditions and the results of intragroup comparisons between the two study conditions

		Sociotropy – predominance		Autonomy – predominance	
		M (*SD*)	*z* (*p*)	*M* (*SD*)	*z* (*p*)
Monitoring other people's states	C1 responsive	2.32 (0.83)	−2.58 (.010)	1.71 (0.72)	−1.37 (.170)
	C2 unresponsive	1.98 (0.61)		1.90 (0.87)	
Decentration	C1 responsive	2.62 (1.03)	−2.49 (.013)	1.83 (0.87)	−1.53 (.130)
	C2 unresponsive	1.98 (0.74)		2.27 (1.24)	

Note. C1 – Condition 1: imagining a significant other's responsiveness; C2 – Condition 2: imagining a significant other's unresponsiveness.

INTERGROUP COMPARISONS

Further, as a result of intergroup comparisons (comparison of the level of mentalization in both groups first in Condition 1 and then in Condition 2), the investigators found that in Condition 1 (object responsiveness) scores on monitoring other people's internal states were significantly higher in the case of participants from the group with a predominance of sociotropy than in the group with a predominance of autonomy ($z = -2.75$, $p = .006$), while in Condition 2 (object unresponsiveness) this difference was not significant ($z = -1.70$, $p = .088$). A similar situation occurred in the case of decentration – in Condition 1 (object responsiveness), decentration was significantly higher in the group with a predominance of sociotropy compared to the group with a predominance of autonomy ($z = -2.70$, $p = .007$), and this difference disappeared in the second study condition ($z = -0.53$, $p = .590$). The figures below illustrate the relationships discussed for monitoring other people's mental states (Figure 2) and decentration (Figure 3).

Both in the case of monitoring other people's mental states and in the case of decentration, the level of mentalizing in the group with a predominance of sociotropy decreased when the person spoke about a situation after imagining a significant other in the unresponsiveness condition compared to generating a narrative about a situation in which the relational context was the responsiveness of a significant other. By contrast, in the group of participants with a predominance of autonomy, the level of mentalization did not change in the context of the two conditions. Based on the obtained results, it is possible to conclude about the dependence of mentalization on the interaction of stimulus type and the type of predominant configuration of personality dimensions in a given group. Individuals with a predominance of sociotropy are sensitive to the type of stimulus used in the study (responsiveness vs. unresponsiveness of

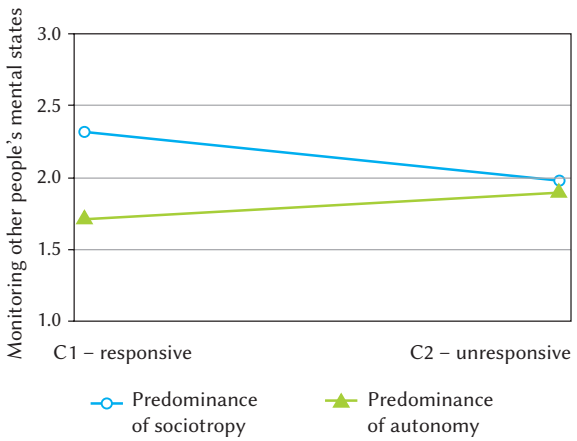

Figure 2. The level of monitoring other people's intrapsychic states in groups with a predominance of sociotropy and with a predominance of autonomy in the two study conditions.

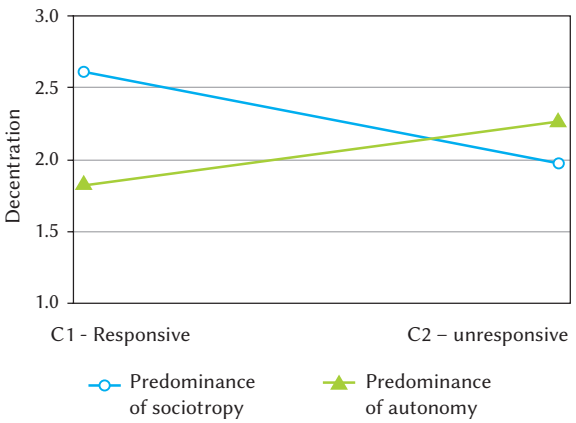

Figure 3. The level of decentration in groups with a predominance of sociotropy and with a predominance of autonomy in the two study conditions.

a significant other), and their interpersonal mentalization breaks down under the influence of a stimulus activating separation anxieties. In individuals with a predominance of autonomy, the significant other's responsiveness or unresponsiveness did not differentiate the level of mentalization.

DISCUSSION

In the present study, I applied nonlinear system theories (Chefetz, 2013; Sperry, 2013) to explain the dynamics of mentalization, and the theory of two personality dimensions proposed by Blatt and Luyten (Blatt, 2008; Luyten & Blatt, 2013) as a conceptualization of two universal kinds of contents of internal representations. The aim of the study was to determine whether there was intraindividual fluctuation of mentalization between utterances preceded by imagining of relational situations, one of which was a situation of responsiveness and the other of unresponsiveness of a significant other. Apart from the dependence of change in the capacity to mentalize on the relational context, I also tested the hypothesis postulating a dependence of mentalization dynamics on the interaction of the relational stimulus with the content of the representation of the self-other relationship activated by that stimulus. In the case of the present study, the content of representations was two configurations of universal personality dimensions – with a predominance of sociotropy and with a predominance of autonomy. The obtained results can be discussed in relation to two important issues: (1) the problems of the stability and changeability of mentalization and the conditions in which mentalization fluctuations occur; (2) interpersonal mentalizing as the only aspect of mentalization whose intensity decreased.

Firstly, the research confirmed the thesis that mentalization is not only a stable trait but should, in certain circumstances, be considered a state (Fonagy et al., 2010; Luyten & Fonagy, 2014; Marszał, 2015). The regressive type of mentalization fluctuation was observed (the first type, according to the classification described above; Figure 1), consisting in a weakening of mentalization caused by a contextual stimulus. However, mentalization fluctuations occurred in response to a specific stimulus in a specific group – in this case, in response to the imagined unresponsiveness of a significant other in participants with a predominance of sociotropic contents. This means that it is not so much stimuli themselves as their interaction with the content aspects of personality that constitutes a determinant of context-dependent mentalization understood as a state. If the stimulus closely corresponds with the content of an element of intrapsychic structures (conceptualized as self and object representations, internal working models, or affect scripts), the content of that element of the system codetermines the weakening of mentalization. What makes a difference is the type of stimulus and the kind of representation the stimulus encounters: some representations are sensitive to a given stimulus while others are not. In principle, this means that the relational context, which is emphasized in process systemic conceptions (Sperry, 2013), is made up of both representations and stimuli (Chefetz, 2013).

At the same time, it was found that, with a specific set of stimuli and representations, mentalization behaves at a given moment like a trait – namely, that its level changes depending on the impact of the stimulus. The group with the configuration of the contents of representations suggesting a predominance of self-definition/autonomy exhibited a stable, unchanging pattern of mentalization (status quo according to the classification described above; Figure 1). This, however, does not mean that this group is not prone to the weakening of mentalization at all. In the present study, I manipulated the stimuli connected with the sense of security in a relationship, intimacy, and dependence as well as a sense of abandonment or separation, which is not a crucial theme or content of representations in people with a predominance of self-definition. The system of representations in people from this group probably includes representations more sensitive to stimuli associated with failure and helplessness, containing criticism or depriving of the possibility of control, activating engulfment anxieties (Blatt, 2008). The lack of mentalization fluctuations is also explained by the fact that self-definition as a personality dimension correlates with avoidant attachment (Luyten & Blatt, 2011, 2013), and people with an avoidant attachment style use the regulatory strategies of deactivation; as a result, they have a higher threshold of controlled mentalization deactivation compared to individuals with a fearful attachment style, which is associated with relatedness (Fonagy et al., 2010).

Secondly, it should be noted that in the present study only interpersonal mentalization was weakened, and only in the group with a predominance of sociotropy. It is therefore not possible to generalize the fluctuation of this ability to self-reflective mentalization and mastery with a relational stimulus of the same kind as the one used in the present study. Fluctuations of this component of mentalization may give an insight into what happens in the minds of individuals with a predominance of sociotropic contents – that is, which function is lost under the influence of a particular relational stimulus and what the mechanism of mentalization change consists in. Interpersonal mentalization means the ability to infer other people's states independently of the egocentric perspective dictated by one's own representations (Allen et al., 2008; Górska & Cierpiałkowska, 2016). While self-reflective mentalization concerning subjective mental states tends to be less problemat-

ic, interpersonal mentalization usually constitutes a more serious problem, both in personality disorders (Dimaggio et al., 2009) and in the normal population (Royzman, Cassidy, & Baron, 2003). It is a relatively advanced ability connected with subtly testing the social reality (Caligor & Clarkin, 2010), frequently lost in moments of regression in favor of excessively subjective inference. The interpersonal interpretive function is responsible for perspective taking – that is, for the understanding that other people may reach different conclusions based on the same data – and is often weakened (Allen et al., 2008). Disturbances in mentalization about other people may take the form of hypermentalizing, which is excessive mentalization based on primitive projection consisting in attributing one's own subjective states to others (Fonagy & Luyten, 2009; Sharp et al., 2011). In the light of object relations theory, excessive projection is caused by weak differentiation of self and object representations, of internal and external reality – a lack of boundaries and a lack of a sense of separateness (Bergman & Harpaz-Rotem, 2004; Gergely, 2000; Tyson, 2006).

Individuals with a predominance of relatedness/sociotropy have a greater problem with maintaining the borders between internal and external reality and with differentiating self and object representations than individuals with a predominance of self-definition, who often defensively and excessively separate themselves (Robins et al., 1994). Interpersonal mentalization requires good differentiation and boundary setting, since the monitoring of other people's states and decentration are optimal only when they happen *independently* of the person's own mental states (Dimaggio et al., 2009). In this context, the results of the present study can be interpreted as attesting to a loss or weakening of the function of differentiating and maintaining stable boundaries within self and object representations in the group with a predominance of sociotropy following a threatening stimulus activating separation anxieties (Mahler, Pine, & Bergman, 1975).

The present study has certain limitations, which suggest recommendations for further research. First of all, the sample was not very large or diverse in terms of the strength of the prevalence of sociotropy over autonomy, which means the generalization of results should be approached with caution and accompanied by attempts to replicate the study in different populations. Furthermore, a student population was examined, which also limits the generalization of results to other groups. Moreover, I applied only manipulation with a contextual stimulus that corresponded with sociotropy representation contents. In other studies testing the hypothesis postulating the interaction of the stimulus with representational contents, it would be important to take different representational contents into account – particularly the kind of content associated with the developmental model (Cierpiałkowska, 2016), and they are characteristic of autonomous people, e.g. personal failure, loss of autonomy. In addition, a standard procedure used to verify psychoanalytic hypotheses and relating to attachment theory was used to activate the internal representations. An analogous type of priming occurs in many other studies as, for example, a description of the situation reflecting the content of the representation (Hunyady, Josephs, & Jost, 2008), a guided image referring to the basic script or visualization of the face of the attachment figure (Mikulincer & Shaver, 2001). However, the activation of unconscious representations was not controlled by additional, independent indications, e.g. a physiological index.

CONCLUSIONS

Mentalization processes function both as a trait and as a state. There are certain conditions in which fluctuation in the capacity to mentalize can be observed – namely, the impact of a relational stimulus corresponding to the content of the representation activated by that stimulus in the system of intrapsychic structures. Individuals with a predominance of representational contents connected with the relatedness dimension are sensitive to the breakdown in interpersonal mentalization caused by a stimulus activating separation anxieties, which can be interpreted as an effect of a weakening of the function of differentiating and maintaining stable boundaries between self and object representations.

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References

Allen, J. G., Fonagy, P., & Bateman, A. W. (2008). *Mentalizing in clinical practice*. Washington, DC: American Psychiatric Press.

Baldwin, M. W., Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social cognitive conceptualization of attachment styles: Availability and accessibility effects. *Journal of Personality and Social Psychology, 71*, 94–109.

Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A four category model of attachment. *Journal of Personality and Social Psychology, 61*, 226–241.

Beck, A. T. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton & J. E. Barrett (Eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265–290). New York: Raven.

Beck, J. S. (2005). *Terapia poznawcza* [Cognitive therapy]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Beaulieu-Pelletier, G., Bouchard, M.-A., & Philippe, F. L. (2013). Mental States Task (MST): Development, validation, and correlates of a self-report measure of mentalization. *Journal of Clinical Psychology*, *69*, 671–695.

Bergman, A., & Harpaz-Rotem, I. (2004). Revisiting rapprochement in the light of contemporary developmental theories. *Journal of the American Psychoanalytic Association*, *52*, 555–570.

Blatt, S. J. (2008). *Polarities of experience: Relatedness and self-definition in personality development, psychopathology, and the therapeutic process.* Washington, DC: American Psychological Association Press.

Bosmans, G., Van de Walle, M., Goossens, L., & Ceulemans, E. (2014). (In)variability of attachment in middle childhood: Secure base script evidence in diary data. *Behaviour Change, 31*, 225–242.

Bouchard, M.-A., Target, M., Lecours, S., Fonagy, P., Tremblay, L.-M., Schachter, A., & Stein, H. (2008). Mentalization in adult attachment narratives: Reflective functioning, mental states, and affect elaboration compared. *Psychoanalytic Psychology, 25*, 47–66.

Bowlby, J. (1969). *Attachment and loss: Attachment*. New York: Basic Books.

Brown, W. G. (2008). Failure to mentalize: Defect or defense? *Psychoanalytic Social Work, 15*, 28–42.

Caligor, E., & Clarkin, J. (2010). An object relations model of personality and personality pathology. In J. F. Clarkin, P. Fonagy, & G. O. Gabbard (Eds.), *Psychodynamic psychotherapy for personality disorders: A clinical handbook* (pp. 3–36). Washington, London: American Psychiatric Publishing, Inc.

Carcione, A., Dimaggio, G., Conti, L., Fiore, D., Nicolò, G., & Semerari, A. (2010). *Metacognition Assessment Scale v. 4.0.* Unpublished manuscripts.

Choi-Kain, L. W., & Gunderson, J. (2008). Mentalization: Ontogeny, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry, 165*, 1127–1135.

Cierpiałkowska, L. (2016). Współczesna psychoanaliza i jej znaczenie dla psychologii klinicznej [Contemporary psychoanalysis and its contribution to clinical psychology]. In L. Cierpiałkowska & H. Sęk (Eds.), *Psychologia kliniczna* [Clinical Psychology] (pp. 102–126). Warsaw: PWN.

Cierpiałkowska, L., Górska, D., Soroko, E., & Marszał, M. (2017). *Heterogeniczność osób o organizacji osobowości borderline a przetwarzanie emocjonalne bodźców relacyjnych* [Heterogeneity of borderline personality organization and emotional processing of relational stimuli]. Unpublished manuscript, UAM Poznań.

Chefetz, R. A. (2013). A fluctuating capacity to mentalize: Affect scripts and self-state systems as (not so) "strange attractors": A discussion of Margy Sperry's "Putting our heads together: Mentalizing systems". *Psychoanalytic Dialogues, 23*, 708–714.

Collins, T. J., & Gillath, O. (2012). Attachment, breakup strategies, and associated outcomes: The effects of security enhancement on the selection of breakup strategies. *Journal of Research in Personality, 46*, 210–222.

Crowell, J. A., Treboux, D., & Waters, E. (2002). Stability of attachment representations: The transition to marriage. *Developmental Psychology, 38*, 467–479.

Davila, J., & Sargent, E. (2003). The meaning of life (events) predicts changes in attachment security. *Personality and Social Psychology Bulletin, 29*, 1383–1395.

Dimaggio, G., Carcione, A., Nicolò, G., Conti, L., Fiore, D., Pedone, R., Popolo, R., Procacci, M., & Semerari, A. (2009). Impaired decentration in personality disorder: A series of single cases analysed with the metacognition assessment scale. *Clinical Psychology and Psychotherapy, 16*, 450–462.

Dimaggio, G., & Lysaker, P. H. (2015). Metacognition and mentalizing in the psychotherapy of patients with psychosis and personality disorders. *Journal of Clinical Psychology, 71*, 117–124.

Dimaggio, G., Nicolo, G., Fiore, D., Centenero, E., Semerari, A., Carcione, A., & Pedone, R. (2008). States of minds in narcissistic personality disorder: Three psychotherapies analyzed using the grid of problematic states. *Psychotherapy Research: Journal of the Society for Psychotherapy Research, 18*, 466–480.

Fischer-Kern, M., Doering, S., Taubner, S., Hörz, S., Zimmermann, J., Rentrop, M., Schuster, P., Buchheim, P., & Buchheim, A. (2015). Transference-focused psychotherapy for borderline personality disorder: Change in reflective function. *The British Journal of Psychiatry, 207*, 173–174.

Fonagy, P., Bateman, A., & Luyten, P. (2012). Introduction and overview. In A. Bateman & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice* (pp. 3–41). Arlington, VA: American Psychiatric Publishing, Inc.

Fonagy, P., Luyten, P., Bateman, A., Gergely, G., Strathearn, L., Target, M., & Allison, E. (2010). Attachment and personality pathology. In J. F. Clarkin, P. Fonagy, & G. O. Gabbard (Eds.), *Psychodynamic psychotherapy for personality disorders: A clinical handbook* (pp. 37–88). Washington, London: American Psychiatric Publishing, Inc.

Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Developmental Psychopathology, 21*, 1355–1381.

Fraley, R. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review, 6*, 123–151.

Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, *23*, 615–625.

Fraley, R., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology, 4*, 132–154.

Gergely, G. (2000). Reapproaching Mahler: New perspectives on normal autism, symbiosis, splitting and libidinal object constancy from cognitive developmental theory. *Journal of the American Psychoanalytic Association, 48*, 1197–1228.

Gillath, O., & Shaver, P. R. (2007). Effects of attachment style and relationship context on selection among relational strategies. *Journal of Research in Personality, 41*, 968–976.

Goldenberg, H., & Goldenberg, I. (2008). *Family therapy: An overview* (7th ed.). San Francisco, CA: Thompson Brooks.

Górska D. (2015). Procesy mentalizacji podczas aktywacji systemu przywiązania w populacji osób bez zaburzeń [The mentalization processes in attachment system activation among the people without disorders]. *Polskie Forum Psychologiczne, 20*, 536–558.

Górska, D., & Cierpiałkowska, L. (2016). Mentalizacja jako stan i jako cecha – perspektywa strukturalno-procesualna [Mentalization as a state and as a trait – the structural-processual perspective]. In L. Cierpiałkowska & D. Górska (Eds.), *Mentalizacja z perspektywy rozwojowej i klinicznej* [Mentalization from the developmental and clinical perspective] (pp. 13–41). Poznań: Wydawnictwo Naukowe UAM.

Harris, A. (2013). Discussion: Putting our heads together: Mentalizing systems. *Psychoanalytic Dialogues, 23*, 700–707.

Hörz-Sagstetter, S., Mertens, W., Isphording, S., Buchheim, A., & Taubner, S. (2015). Changes in reflective functioning during psychoanalytic psychotherapies. *Journal of the American Psychoanalytic Association, 63*, 481–509.

Hunyady, O., Josephs, L., & Jost, J. T. (2008). Priming the primal scene: Betrayal trauma, narcissism, and attitudes toward sexual infidelity. *Self and Identity, 7*, 278–294. doi: 10.1080/15298860701620227

Kernberg, O. F. (2016). What is personality? *Journal of Personality Disorders, 30*, 145–156.

Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships, 1*, 123–142.

Levy, K. N., Meehan, K. B., Kelly, K. M., Reynoso, J. S., Weber, M., Clarkin, J. F., & Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference-focused psychotherapy for borderline personality disorder. *Journal of Consulting and Clinical Psychology, 74*, 1027–1040.

Luyten, P., & Blatt, S. J. (2011). Integrating theory-driven and empirically-derived models of personality development and psychopathology: A proposal for DSM-V. *Clinical Psychology Review, 31,* 52–68.

Luyten, P., & Blatt, S. J. (2013). Interpersonal relatedness and self-definition in normal and disrupted personality development. *American Psychologist, 68*, 172–183.

Luyten, P., & Blatt, S. J. (2016). A hierarchical multiple-level approach to the assessment of interpersonal relatedness and self-definition: Implications for research, clinical practice, and DSM planning. *Journal of Personality Assessment, 98*, 5–13.

Luyten, P., & Fonagy, P. (2014). Mentalising in attachment contexts. In P. Holmes & S. Farnfield (Eds.), *The Routledge handbook of attachment: Theory* (pp. 107–126). Hove, UK: Routledge.

Lysaker, P. H., Carcione, A., Dimaggio, G., Johannesen, J. K., Nicolò, G., Procacci, M., & Semerari, A. (2005). Metacognition amidst narratives of self and illness in schizophrenia: Associations with neurocognition, symptoms, insight and quality of life. *Acta Psychiatrica Scandinavica, 112*, 64–71.

Mahler, M. S., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant.* New York: Basic Books.

Marszał, M. (2015). *Mentalizacja w kontekście przywiązania. Zdolność do rozumienia siebie i innych u osób z osobowością borderline* [Mentalization in the context of attachment. The ability to understand self and others in people with borderline personality]. Warsaw: Difin.

Marszał, M. (2016). Metody pomiaru zdolności do mentalizacji [Methods of measuring the ability to mentalize]. In L. Cierpiałkowska & D. Górska (Eds.), *Mentalizacja z perspektywy rozwojowej i klinicznej* [Mentalization from the developmental and clinical perspective] (pp. 161–181). Poznań: Wydawnictwo Naukowe UAM.

Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology, 81*, 97–115.

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford Press.

Overall, N. C., Fletcher, G. J. O., & Friesen, M. D. (2003). Mapping the intimate relationship mind: Comparisons between three models of attachment representations. *Personality and Social Psychology Bulletin, 29*, 1479–1493.

Pervin, L. A. (2001). A dynamic systems approach to personality. *European Psychologist, 6*, 172–176. doi: http://dx.doi.org/10.1027//1016-9040.6.3.172

Pierce, T., & Lydon, J. E. (2001). Global and specific

relational models in the experience of social interactions. *Journal of Personality and Social Psychology, 80*, 613–631.

Robins, C. J., Ladd, J., Welkowitz, J., Blaney, P. H., Diaz, R., & Kutcher, G. (1994). The Personal Style Inventory: Preliminary validation studies of new measures of sociotropy and autonomy. *Journal of Psychopathology and Behavioral Assessment, 16*, 277–300.

Rowe, A., & Carnelley, K. B. (2003) Attachment style differences in the processing of attachment-relevant information: Primed-style effects on recall, interpersonal expectations, and affect. *Personal Relationships, 10*, 59–75.

Royzman, E. B., Cassidy, K. W., & Baron, J. (2003). "I know, you know": Epistemic egocentrism in children and adults. *Review of General Psychology, 7*, 38–65.

Rudden, M., Milrod, B., Target, M., Ackerman, S., & Graf, E. (2006). Reflective functioning in panic disorder patients: A pilot study. *Journal of the American Psychoanalytic Association, 54*, 1339–1343.

Sharp, C., Pane, H., Ha, C., Venta, A., Patel, A. B., Sturek, J., & Fonagy, P. (2011). Theory of mind and emotion regulation difficulties in adolescents with borderline traits. *Journal of the American Academy of Child and Adolescent Psychiatry, 50*, 563–573.

Sperry, M. (2013). Putting our heads together: Mentalizing systems. P*sychoanalytic Dialoques, 23*, 683–699.

Sutin, A. R., & Gillath, O. (2009). Autobiographical memory phenomenology and content mediate attachment style and psychological distress. *Journal of Counseling Psychology, 56*, 351–364.

Tyson, P. (2006). Boundary formation in children: Normality and pathology. In S. Akhtar (Ed.), *Interpersonal boundaries: Variations and violations* (pp. 15–28). Lanham: Jason Aronson.

Varvin, S., & Rosenbaum, B. (2003). Extreme traumatisation: Strategies for mental survival. *International Forum of Psychoanalysis, 12*, 5–16.

Zhang, F., & Labouvie-Vief, G. (2004). Stability and fluctuation in adult attachment style over a 6-year period. *Attachment & Human Development 6,* 419–437.