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Emilia Soroko[1]
Adam Mickiewicz University

Internal relationship patterns in borderline and neurotic personality organization: An analysis of self-narratives[2]

Abstract:

The main goals of this study are 1) to explore whether internal relationship patterns are related to personality organization, and 2) to recognize the role that selected relationship patterns play in diagnosing personality organization levels. Internal relationship patterns were assessed according to the core conflictual relationship theme (CCRT) – about wishes (WS), responses from others (RO), and responses of the self (RS) – as identified from participants' self-narratives about important relationships. Significant differences in the frequencies of patterns were found among participants with borderline personality organization (BPO), neurotic personality organization (NPO), and integrated personality (IPO). For example, the majority of negative RS responses were detected in the BPO sample. The study supports the thesis that relationship patterns might be related to personality organization, and that object representation complexity may be a good predictor of integrated personality organization.

Keywords:

object relations theory, level of personality organization, relationship patterns, CCRT, narrative analysis, clinical diagnosis

Streszczenie:

Celem prezentowanego artykułu jest 1) zbadanie, czy wewnętrzne wzorce relacyjne wiążą się z organizacją osobowości oraz 2) rozpoznanie roli wybranych właściwości wzorców relacyjnych w diagnozie poziomu organizacji osobowości. Wewnętrzne wzorce relacyjne oceniano według konfiguracji trzech komponentów rdzeniowych konfliktowych tematów relacyjnych (Core Conflictual Relationship Theme - CCRT) – pragnienie, odpowiedź innego odpowiedź self, które identyfikowano w autonarracjach osób badanych na temat ważnych relacji interpersonalnych. Rezultaty wskazują, że częstość wzorców relacyjnych w grupach osób z poziomem organizacji osobowości borderline (BPO), neurotycznym (NPO) oraz zintegrowanym (IPO) rozkładała się odmiennie. Ponadto większość negatywnych reakcji self zidentyfikowano w grupie BPO. Badania wstępnie potwierdzają tezę, że wzorce relacyjne mogą być powiązane z poziomem organizacji osobowości oraz że złożoność reprezentacji obiektu jest dobrym predyktorem zintegrowanego poziomu organizacji osobowości.

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Słowa kluczowe:
teoria relacji z obiektem, poziom organizacji osobowości, wzorce relacyjne, CCRT, analiza narracji, diagnoza kliniczna

Introduction

Interpersonal functioning appears to be diagnostically significant in the psychiatric assessment of personality disorders (such as ICD-10, DSM-IV-R, and DSM-V) and in psychotherapeutic practice, and especially in the psychodynamic approach (e.g. Kernberg, 2004, 2005) undertaken in this paper. In the personality disorder definitions in psychiatric classifications, the connections between these disorders and interpersonal functions are important areas where inflexible, pervasive, and enduring inner experience patterns and behavior occur. Similarly, according to Kernberg's psychodynamic theory (Kernberg, 2004, 2005; Caligor et al., 2007) – in which personality disorders by far constitute borderline personality organization – this problematic relation to personality is central to human psychological functioning.

For this reason, interpersonal functioning in clinical diagnoses is used to indicate the severity and type of psychopathology (see e.g. Treloar, Lewis, 2009). It is assumed that the way people interact with each other is characterized by a certain repetitiveness or predominance of particular phenomena. To highlight relationships with others, we may use the term relationship pattern (see, e.g., Luborsky, Barrett, 2007). Some initial attempts have been made to distinguish pathological relationship patterns from undisturbed ones. The following are listed as basic to disturbed relationship patterns (Drapeau et al. 2009, Diguer et. al. 2001 Diguer et al. 2004; Cierpka et al., 1998; Drapeau, Perry, 2004): 1) low relationship pattern differentiation , that is, the inability to use a large repertoire ininteracting with others; 2) high rigidity, or the presence of dominant and/or stereotypical relationship patterns and/or undiversified relationships; 3) negative relationship patterns, or nonfulfilled relational needs (such as intimacy, closeness, and sense of security), despite being in a relationship.

It is worth pointing out that the connection between personality disorders and relationship patterns can be empirically explored from two perspectives: external interpersonal patterns, understood as social behaviors with some consequences and causes – e.g. Körner et al., 2004; Allen et al., 2006; Selby et al., 2008; Stepp et al., 2010; and internal patterns (originating from experiences in early childhood relationships, which serve as templates for current experiences – e.g. Freud's transference concept; Freud, 1911/2007; see also: Baranger, 2012). Concerning the internal perspective, empirical research is

impeded because there is no coherently stated theoretical position within modern psychoanalysis, as well as there being methodological difficulties in gaining access to what is intrapsychic by using objectified measures. These difficulties are intensified by research participants who may have little insight into their own disordered functioning (see Bell et al., 1986). Therefore, in empirical research, it would seem to be very useful 1) to begin with the patient's self-narration, namely, how the person perceives, represents, and narrates his or her own autobiographical interpersonal experiences, and then 2) to interpret the utterances as internal mental representations of self and objects. It seems particularly useful for clinicians to simply employ this perspective in their everyday work with patients (Crits-Christoph et al., 1994). The research here is presented from the internal viewpoint on relationship patterns: we deal with the mental representation of relationships with important others as the main concept, and we evaluate this concept by analysingself-narratives.

Object relations theories, broadly considered, best explain relationship patterns from an internal perspective. These theories show that personality develops from experiences in early childhood, which produce internal self and object representations (Bell et al., 1986; Fonagy, Bateman, 2008; Westen et al. 2006). Aggressive impulses associated with environmental factors, maternal care, and constitutional factors determine the personality development (Kernberg, 2004). Self and object representations, which arise from these factors, are believed to be implicated in many, if not most, psychopathological forms (Westen et al., 2006, p. 343). Object relations theory assumes that interpersonal functions depend on significant intrapersonal structural and dynamic preconditions with their relational representations and whether such differentiation between self and object representations – as well as their increasingly integratedbad and good aspects – develops (Kernberg, 1976, 2005).

Based on this perspective, Kernberg (1976, 2004) proposed a model of personality organization levels that includes apsychopathological level. Pathological severity ranges from 1) psychotic personality organization (PPO), through 2) borderline personality organization (BPO), to 3) neurotic personality organization (NPO). The levels are determined by the differences they show in the maturity of defense mechanisms and superego, reality testing, ego-identity integration, rigidity, and object relationship patterns (Kernberg, 2004, 2005; Hibbard et al., 2010). Besides disorders, Kernberg (2004, p. 93-99) also describes the normal or integrated personality organization (IPO), which is characterized particularly by 1) an integrated self-concept and an integrated concept of significant others, 2) ego strength (self-understanding, impulse control, the capacity to sublimate, and self-observation), 3) an integrated and mature superego, and 4) an appropriate and satisfactory management of libidinal and aggressive impulses.

Table 1. The criteria of personality pathology level differentiation. (Based on: Kernberg, 2004, Caligor et al, 2007; Diguer et al. 2004).

Criteria	PPO	BPO	NPO	IPO
defense mechanisms	primitive (e.g. primitive denial, omnipotent control, devaluation)	immature defense mechanisms (splitting,-based, e.g. projective identification)	mature defense mechanisms, repression-based, e.g. isolation of affect, rationalization)	mature defense mechanisms (e.g, suppresion, sublimation, humor)
superego	immature	immature	integrated superego	integrated superego
reality testing	Poor	essentially intact but deteriorates in the setting of affective intensity	intact and stable	intact and stable
ego-identity integration	identity diffusion	identity diffusion	good sense of identity	good sense of identity
rigidity	severe rigidity	severe rigidity	Rigidity	flexible adaptation

Object relations are the basis for transference relations – activating past emotional experiences (from early childhood) in current relations – which direct the desires and expectations toward the interaction partner and of one's own expectations connected with fulfilling or frustrating these desires. In developmental relationship contexts, we may expect a certain consistency and repetitiveness in maladaptive relationships, although it is also worth pointing out that social cognition literature (which focuses on the external viewpoint on relationship patterns) emphasizes specific situational relationships (Crits-Christoph et al., 1994).

In analyzing transference structures in the relationship pattern, we may distinguish three components that constitute the relational narrative episode (Crits-Christoph et al., 1994; Luborsky, Friedman, 1998; Luborsky et al. 2004; Luborsky, Barrett, 2007; Barber et al. 1995): 1) the representation of the self's wishes, needs, or intentions (WS); 2) the response (anticipated or real) of the other (RO); 3) the subject's own emotional, behavioral, or symptomatic responses to others' responses (RS). This division is practically employed in the Core Conflictual Relationship Theme method (CCRT; Luborsky, 1984; Luborsky, Friedman, 1998; Luborsky et al. 2004; Luborsky, Barrett, 2007; Barber et al. 1995). The method is based on a three-element narrative analysis about important interpersonal relations (frequently collected by the special Relational Anecdotes Paradigm interview; Wiseman, Barber, 2004), and is widely used in studying relationship patterns in research with clinical (e.g. Ayala, 2005; Vanheulea et al. 2007) and nonclinical populations (Waldinger et al. 2003; Vandenbergen et al., 2009), in psychotherapy research (e.g. Barber et al. 1995; Markin, Kivlighan, 2008), and in general and interdisciplinary research (e.g. Loughead et al.

2010). The CCRT method has been constantly developed psychometrically (Luborsky, Friedman, 1998; Parker, Grenyer, 2007; Luborsky et al. 2004).

Using the CCRT method, it has been demonstrated that, for example, people have identifiable core relationship themes that are repeated across multiple narrated stories about important relationships. However, it is not clear what the relation is between a single pervasive theme or themes applied within a specific situation and the dimensions of psychopathology (Crits-Christoph et al., 1994). One hypothesis states that when a single main core is present a conflictual relationship theme might tend to characterize patients with greater pathology, or those who have had particularly restrictive or severe interpersonal experiences in their development – such as personality disorders. On the other hand, healthy individuals are rather characterized by more highly differentiated schemes that lead to situationally specific behavior, and to desires that are more adequate to the social context (Crits-Christoph et al., 1994). Moreover, research on the relation between personality organization and the patterns obtained through the CCRT method are not unambiguous. For example, more similarities than differences were found between personality organization levels (Diguer et al., 2001). This contradicts the clinicians' intuitions, according to which patients with different disorders have different interpersonal relation patterns . In measuring the psychopathological level by defining the level of defense mechanisms, it has been observed that patients who function high defensively show less pervasiveness in the self wish and the response of others, and more positivity in the others' responses , while patients who function low defensively consistently display greater pervasiveness and negativity (de Roten et al., 2004).

The configured CCRT components may serve as a matrix for establishing relationship patterns characteristic of the personality organization levels (see the next section, *Measures*). Although CCRT components deals with storytelling in which self and others are the heroes (protagonists) , the components do not sufficiently inform on how the narrator considers the other person's total complexity of the internal psychological functioning (e.g. motives, emotions, intentions, and values). Information about the other person's psychology is an important indicator of the objects' represented complexity (see Westen, 1990).

The objects' increased complexity (and self as well) is strongly related to personality organization, severity of psychopathology, and it allows for better affect regulation, and increased tolerance of ambivalence toward others (Blatt et al. 1997; Benedik, 2009). According to Kernberg (e.g. 2005), ambivalence in the object representation (whether the person can keep in mind both positive and negative object representations, even when frustrated) might serve as a sign of higher level personality organization, and so we

might expect that such an analysis of others' psyches will differentiate between people with more and less severe personality disorders. It would therefore seem to be a matter of interest whether the narrator spontaneously talks about the other person's thoughts, feelings, intentions, and desires. Spontaneously generated utterances regarding others' minds might be seen as processes activated so as to serve regulatory functions (regulation of emotions and affects). It should be highlighted that the ability to consider other people's mental states is broadly discussed in literature on personality disorders under concepts that are both compound and anchored in human development, such as decentering – "the ability to see the perspective from which others relate to the world and to realise that they may act with values and goals different from one's own and independent from the relationship with oneself" (Dimaggio et al., 2005, p. 15) –, mentalization, and reflective function – "an individual's implicit and explicit interpretation of his or her own and others' actions as meaningful on the basis of intentional mental states such as personal desires, needs, feelings, beliefs, and reasons" (Fischer-Kern et. al. 2010, p. 398; see also Fonagy,1996; Fonagy, Bateman, 2008) –, or more classically the observing ego function – the ability to observe one's own psychological functioning, a concept rooted in Freud's work and also mentioned by Kernberg (Caligor et al., 2007). Nonetheless, we here constrict our interest solely in focusing on important others' mental functioning to indicate object representation complexity.

In summary, the level of narrative organization might be seen as a diagnostic label for a twofold process: 1) to dynamically describe health and pathology phenomena, and 2) to dynamically describe the internal causes of health and pathology, based on the intrapsychic mental self structures and object representations. The self-narrative about the relationship with an important other delivers the key to the intrapsychic reality, and thus provides an additional view on the causes of health and pathology. In other words, through narrative analyses about the person's relationships with important others, we are able to track internal object relations representations and to explore the possible and most distinctive patterns concerning why the person experiences that relationship. The research presented here is thus an attempt to decipher relationship patterns using CCRT relational components and object representation complexity.

In the light of the findings mentioned above, this report's aims are threefold, and address specific questions: Are relationship patterns, as obtained through CCRT component analysis, related to personality organization levels ? Are the observed relations, if any, consistent with theoretical expectations and clinical knowledge? Finally, are object representation complexity and secondary variables important in diagnosing personality organization levels?

Materials and Methods

Personality organization. To determine personality organization, two questionnaires were used in combination: The Borderline Personality Inventory (BPI, Leichsenring, 1999; Polish adaptation by Cierpiałkowska, 2001; cf. Górska, 2006) and the Neuroticism subscale from the Eysenck Personality Questionnaire (EPQ-R, Eysenck et al., 1985; Polish adaptation by Brzozowski, Drwal, 1995). BPI is a highly reliable and valid self-reporting method, used in borderline personality screening and in borderline personality organization classification (Leichsenring, 1999). It consists of 53 items and quantitatively assesses borderline pathology. BPO was diagnosed when the score on the BPI was above 20, which is consistent with the suggestion by the test's author. NPO was diagnosed when the Neuroticism score was high or medium (according to the normalization scores; see Brzozowski, Drwal, 1995), but also when the BPI score was below 20. Thus, in classifying participants to the NPO group, we included people who self-reported neurotic symptoms, but excluded those with symptoms specific to BPO. The NPO group comprises people who suffer from emotional instability, indefinable somatic symptoms or emotional disregulation but at the same time do not employ pathological splitting or dissociation (low BPI score). In other words, we excluded people with splitting and included people who suffer from emotional disturbances, which in great probability reflects neurotic personality organization (see other ways to NPO group selection – Benedik, 2009; Leichsenring, 2004; Hibbard et al., 2010). Consequently, both low scores in Neuroticism and BPI were recognized as IPO (see Table 2).

Table 2. Information about the sample.

Participants (N = 51)			
Level of personality organization	BPO (N = 19), 37.3%	NPO (N = 14), 27.5%	IPO (N = 18), 35.3%
Clinical population	N = 10	N = 6	-
Non-clinical population	N = 9	N = 8	N = 18
Selection criteria	high BPI	high or medium Neuroticism but low BPI	low BPI and low Neuroticism

In object relations theory, implicit processes and structures are more pivotal than explicit symptoms, but the former lead to the latter, and might be seen as a cause. However, it is possible to determine the level of personality organization indirectly through the prevalence of symptoms, because severe symptoms (such as derealization associated with identity diffusion) are not present in higher personality organization levels , and if neurotic symptoms (such as anxiety or lack of self-worth) occur alone, without more severe symptoms, they indicate a higher personality organization level. Nonetheless, we assume that the combinedsymptoms help us to determine the personality organization level.

The mean neuroticism score in the IPO group was 8.39 (SD = 3.40), which was significantly lower (*post hoc* Dunett T3, $p < 0.05$) than the mean neuroticism score in the NPO and BPO groups (respectively, $M_{BPO} = 17.43$, $SD = 1.74$; $M_{NPO} = 17.21$, $SD = 4.05$; $F(2, 48) = 41.86$, $p < 0.001$). The mean BPI score in the BPO group was 26.58, which was significantly higher (*post hoc* Tukey HSD, $p < 0.05$) than the mean BPI score in the NPO and IPO groups (respectively, $M_{NPO} = 9.93$, $SD = 4.98$; $M_{IPO} = 8.56$, $SD = 4.16$; $F(2, 48) = 74.54$, $p < 0.001$).

Relationship patterns. Relationship patterns were assessed using three components from the Core Conflictual Relationship Theme method (CCRT; Luborsky, 1984; Luborsky et al., 1998; Luborsky, Friedman, 1998; Luborsky et al. 2004; Luborsky, Barrett, 2007; Barber et al. 1995): identifiying 1) representative self-wishes, needs, or intentions (WS); 2) the response (anticipated or real) by the other (RO); 3) the subject's response to the other (RS). These components were assessed through self-narratives by two trained raters using first tailor-made categories. Judges were expected to read the text, interpret it according to the three components, and note which from about five to ten expressions were the most adequate. Judges were then asked to translate their tailor-made scoring into the standard categories (clusters) provided by CCRT, which covers eight WS's, eight RO's, and eight RS's (Luborsky, Barrett, 2007) (see Table 3). In each self-narrative, both the best-fitting category and second-best fitting were tagged for each component (WS, RO, RS), and the inter-rater agreement was established using Cohen's *kappa* coefficient for the first best-fitting category. The inter-rater agreement was satisfactory; for the wishes (WS), the kappa value was $K = 0.47$ ($z = 3.97$, $p < 0.001$); for the response of the other (RO), $K = 0.64$ ($z = 4.89$, $p < 0.001$); while for the self response(RS), $K = 0.68$ ($z = 5.12$, $p < 0.001$). In order to more explicitly explore the relationship patterns, and to reduce the many diverse distinct categories, the standard categories were each merged into two general categories. After the coding procedure, the wishes (WS) were additionally signed as aggressive or libidinal (according to the classical distinction of drives as aggressive or libidinal, for example, Freud, 1915/2002); the responses of other (RO) were signed as frustrating or fulfilling (in the character analysis tradition, e.g. Johnson, 1994); and the responses of self (RS) as affectively positive or negative (according to the dichotomous affect valence experienced when the relationship ended). This theory-based reduction resulted in the opportunity to assess relationship patterns as a two WS configurations (aggressive vs. libidinal) plus two RO's (frustrating vs. fulfilling) plus two RS's (positive vs. negative). This led to eight possible configurations.

Other variables. Raters are required to mark the presence or absence of a spontaneously made reflection on psychological functioning (as motives, feelings, values, and an important other's beliefs; see also Fonagy, Target, 1996) with regard to each self-narrative

(relational episode). The object representation complexity was defined as the presence (in a text) of spontaneously generated utterances which considered others' minds. The scoring was 0 for definitely absent, 1 for rather absent, 2 for rather present, and 3 for a definitely present consideration of the other's psyche. When a rater made a decision to score a 2 or 3, he or she was required to mark the coherent piece where the participant's self-narrative contained consideration of the other's mind (see also Fischer-Kern et. al. 2010, p. 402). Moreover, the self-narrative's emotional tone was assessed (see McAdams, 1994; McAdams et al., 2004), ranging from definitely negative (0) to definitively positive (3). The inter-rater agreement for object representation complexity was $K = 0.69$ ($z = 10.70$, $p < 0.001$), and for emotional tone $K = 0.89$ ($z = 11.10$, $p < 0.001$). Additionally, the mood at the beginning of the interview was self-reported, and was measured from 0 (very bad mood) to 10 (very good mood).

Table 3. CCRT Categories used to code self-narratives in my study. According to: Luborsky, Barrett, 2007 (p. 112-114).

Wishes (WSs)		Responses from other (ROs)		Responses from self (RSs)	
To assert self	*Agg*	Strong	*Fru or Ful*	Helpful	*Pos*
To oppose, hurt, control	*Agg*	Controlling	*Fru*	Unreceptive	*Neg*
To be controlled, hurt, and not responsible	*Agg*	Upset	*Fru*	Respected and accepted	*Pos*
To be distant and avoid conflicts	*Agg*	Bad	*Fru*	Oppose and hurt others	*Neg*
To be close and accepting	*Lib*	Rejecting and opposing	*Fru*	Self-controlled and self-confident	*Pos*
To be loved and understood	*Lib*	Helpful	*Ful*	Helpless	*Neg*
To feel good and comfortable	*Lib*	Likes me	*Ful*	Disappointed and depressed	*Neg*
To achieve and help others	*Lib*	Understanding	*Ful*	Anxious and ashamed	*Neg*

Note: *Agg* - aggressive, *Lib* - libidinal; *Ful* - fulfilling, *Fru* - frustrating; *Pos* - positive, *Neg* - negative.

Procedure

The sample (N = 51) included voluntary participants both clinically (psychiatric ambulatory or day units) and nonclinically (non-psychology students). All the subjects gave their informed consent. The mean age with BPO was 24.7 years ($SD = 4.80$); with NPO, 24 ($SD = 3.8$); with IPO, 22.2 ($SD = 1.8$). More information is presented in Tables 2 & 4. Participants from the clinical sample were treated with medicine and psychotherapy, but we do not possess any data about treatment in the nonclinical sample.

The sample was selected intentionally. In the nonclinical sample, questionnaires were filled in first (as a screening procedure), and then the participants were requested to take part in an interview at the university research center. The clinical sample participated in the questionnaire survey and interview during the same session in health care centers such as hospitals and clinics. Intentional selection was performed based on the questionnaire results after the interview; so few interviewees were rejected. In both cases, the interviewers were trained and instructed to remain in the background while the respondents told their stories about an important relationship in response to the following request: "Please tell a story about an important relationship you were involved in recently".

Table 4. Biographical information on the participants (N = 51).

Variable	Categories	N	%
Gender	Male	13	25.5
	Female	38	74.5
Level of education	Elementary or vocational school	5	9.8
	Secondary education	35	68.6
	Higher education	11	21.6
Clinical or non-clinical sample	Clinical	16	31.4
	Non-clinical	35	68.6
Self-narrative theme	Ex-partner	10	19.6
	Partner	21	41.2
	Mother	5	9.8
	Father, grandfather	3	5.9
	Sibling	3	5.9
	Friend	8	15.7
	Non-personal (drugs)	1	2

Participants freely choose which relationship to report (self-narrative theme), and their answer was audio-recorded and transcribed verbatim using chosen notations (nonverbal behavior, paralinguistic vocalizations, and pauses). The average narrative was 800 words long (the minimum was 137 and maximum 7,140), and the tokens here were counted without the maze words. The self-narratives were then extracted from the transcripts of the whole interview and the content was analyzed.

Evoking an important interpersonal relationship and deciding to tell a story may involve defensive functioning, self-presentation, affect regulation, and other regulatory processes. Regarding the interview as a whole, we considered the relationship described and the story's emotional tone to be significant and meaningful choices provoked by the internal object representation that is activated when the participant is encouraged to tell

a story about an important relationship. This choice is a kind of compromise between the research interview and the internal object representation, stimulated by the interviewer's instructions, and the choice results in a specific self-narration from which relationship patterns might be extracted. Moreover, we assume that relationship patterns, being object relation representations, are relatively independent from the lexical content, because the relationship pattern is independent from the verbal superstructure.

Results

In analyzing the data, cross-tabulations were employed, using Fisher's exact test to study the frequency configuration of the relationship patterns WS-RO-RS. All eight relationship patterns were found among the 51 participants. Some patterns were more frequent and some less, and there was a significant difference in frequency among the different personality organization levels (see Table 5).

Table 5. Cross-tabulation for frequencies of relationship patterns WS + RO + RS among different personality organization levels.

		Level of personality organization			Sum	Fisher's exact test
Relationship patterns (WS+RO+RS)		IPO	NPO	BPO		
$WS_{LIB} + RO_{FRU} + RS_{POS}$	N	5	3	0	8	n.s.
	% of PO	27.8%	21.4%	0%	15.7%	
$WS_{LIB} + RO_{FUL} + RS_{POS}$	N	6	8	0	14	n.s.
	% of PO	33.3%	57.1%	0%	27.5%	
$WS_{AGG} + RO_{FUL} + RS_{POS}$	N	3	0	1	4	n.s.
	% of PO	16.7%	0%	5.3%	7.8%	
$WS_{LIB} + RO_{FRU} + RS_{NEG}$	N	1	2	7	10	$X^2(2)= 6.2$
	% of PO	5.6%	14.3%	36.8%	19.6%	$p = 0.06$
$WS_{AGG} + RO_{FRU} + RS_{NEG}$	N	3	1	6	10	n.s.
	% of PO	16.7%	7.1%	31.6%	19.6%	
$WS_{AGG} + RO_{FUL} + RS_{NEG}$	N	0	0	1	1	n.s.
	% of PO	0%	0%	5.3%	2.0%	
$WS_{LIB} + RO_{FUL} + RS_{NEG}$	N	0	0	3	3	n.s.
	% of PO	0%	0%	15.8%	5.9%	
$WS_{AGG} + RO_{FRU} + RS_{POS}$	N	0	0	1	1	n.s.
	% of PO	0%	0%	5.3%	2.0%	
Sum	N	18	14	19	51	
		n.s.	$X^2(3) = 8.29$ $p = 0.046$	$X^2(5) = 11.63$ $p = 0.041$		

Note: *Agg* - aggressive, *Lib* - libidinal; *Ful* - fulfilling, *Fru* - frustrating; *Pos* - positive, *Neg* - negative; n.s. - non significant.

The most frequent relationship patterns in the IPO group were WS_{LIB} + RO_{FUL} + RS_{POS} and WS_{LIB} + RO_{FRU} + RS_{POS}. However, these were not significant. In both , the response of self is positive and the wish is libidinal. In the NPO group, the most frequent pattern registered was WS_{LIB} + RO_{FUL} + RS_{POS}. This pattern is nonconflictual: for example, a person wishes to be loved, receives love, and is satisfied. It seems consistent both with the notion that in NPO there is a possibility of gaining satisfaction from interpersonal relationships and that repression-based defenses are often observed. Interestingly, the patterns mentioned above do not appear in the BPO group. The most frequent patterns in BPO were WS_{LIB} + RO_{FRU} + RS_{NEG} and WS_{AGG} + RO_{FRU} + RS_{NEG}, which are characterized by negative self responses and frustrating responses of others. In BPO, some patterns absent in the other groups (IPO and NPO) can also be found: WS_{AGG} + RO_{FRU} + RS_{POS}, WS_{LIB} + RO_{FUL} + RS_{NEG}, and WS_{AGG} + RO_{FUL} + RS_{NEG}. Moreover, the relationship pattern WS_{LIB} + RO_{FRU} + RS_{NEG} appears most frequently in the BPO group compared to the NPO and IPO groups.

Table 6. Differences between personality organization levels according to the WS, RO and RS components.

		IPO		NPO		BPO		Fisher's exact test
		N	%	N	%	N	%	
WS	Agg	6	*37.5*	1	*6.3*	9	*56.3*	X^2 (2) = 6.253; p = 0.038
	Lib	12	*34.3*	13	*37.1*	10	*28.6*	
RO	Fru	9	*31*	6	*20.7*	14	*48.3*	X^2 (2) = 3.635; p = 0.157
	Ful	9	*40.9*	8	*36.4*	5	*26.3*	
RS	Neg	4	*16.7*	3	*12.5*	17	*70.8*	X^2 (2) = 22.566; p < 0.001
	Pos	14	*27.5*	11	*21.6*	2	*52.9*	

Considering the WS, RO, and RS components separately (see Table 5), it can be seen that, in the BPO group, more frequent negative than positive RS and more frequent aggressive than libidinal WS are found when compared with the IPO and NPO groups, whereas in the IPO group, almost equal frequency of aggressive and libidinal WS is noticed, and in the NPO group, more frequent libidinal WS than aggressive is observed.

Logistic regression was applied to determine which variables were most significant in predicting the participants' personality organization level. In order to find predictors of classification for personality organization levels, three models that explain the variance from 54% to 76.4% were obtained in this study (see Table 7). To distinguish between IPO and BPO, or IPO and NPO, the best predictor of classification is the object representation complexity variable. For every one point increased in the score, the probability of belonging to the NPO level decreases to about 79.8% and the probability of

belonging to the BPO level decreases to about 78.8%. In other words, object representation complexity expands the number of proper classifications to 90.5% when BPO and IPO are considered, and to 68.3% when NPO and IPO are considered. However, in distinguishing between disordered personality levels (NPO vs. BPO), the object representation complexity variable does not contribute to classification prediction . Instead, negative RS appears to be the most important factor – classification prediction then expands to 83.3%, when negative RS is concerned.

Table 7. Predictors classifying personality organization level – logistic regression results.

Predictor	**Beta**	**SE**	**Wald X²**	**Sig.**	**Exp(B)**	**R^2 Ne-glerke**	**proper classifica-tion**
Classification IPO - BPO							
Object representation complexity	-1.551	0.786	3.89	0.049	0.212	76.4%	90.5%
Emotional tone	-2.775	1.690	2.695	0.101	0.063		
Classification IPO - NPO							
Object representation complexity	-1.581	0.689	5.26	0.022	0.206	54%	68.3%
Mood	-0.577	0.323	3.187	0.074	0.561		
Classification NPO - BPO							
RS_{NEG} vs. RS_{POS}	7.234	2.884	6.29	0.012	0.001	72.8%	83.3%
Object representation complexity	1.987	1.248	2.536	0.111	7.294		

Discussion

The proportion and frequency of the WS+RO+RS relationship patterns among the different personality organization levels may suggest some directions for thought. First, it might be noted that the relationship patterns are related to personality organization. The pattern WS_{LIB} + RO_{FRU} + RS_{NEG} is most frequent in the BPO group, and this pattern shows evident dissatisfaction concerning the libidinal desirerelationship. In this pattern, a person with BPO desires – for example, to be loved and understood – but perceives the other as rejecting him or her, and in turn feels depressed or anxious. It is consistent with other findings that patients with borderline personalities often feel dissatisfied and disappointed by their interactions with others, and with the theoretical criterion of psychopathology, namely negative relationship patterns (Drapeau, Perry, 2004; see also Drapeau et al. 2010). Moreover, a trend toward negative self-response was identified less often in the IPO and NPO groups than in the BPO group. This may suggest that patients with BPO have difficulty fulfilling relational needs, such as intimacy, closeness, and sense of

security, despite being in a relationship (see also the theoretical analysis in Kernberg, 2004). Additionally, ,the diagnostic results suggest that, given the knowledge of negative RS, we can make more accurate clinical personality assessment decisions. Yet caution is appropriate in such assessments, because all we know is that when an individual with BPO tells a story about an important relationship, he or she will rather choose a relationship in which negative affect, disappointment, or frustration was experienced, and will find him or herself reliving the negative feelings again during the interview.

Another trend was found for the frustrating response of the other, in which people with BPO perceive others as more rejecting than people with IPO or NPO. This is also consistent with Kernberg's view (2004), which suggests that individuals with borderline personality organization may try to get close to others (often idealizing them), and then feel dependent and angry, becoming forced to withdraw (often devaluating others), and ending with overwhelming frustration. It is important here to note that Drapeau and Perry (2004) found some seemingly contradictory evidence that borderline patients perceive others as more loving than patients with other personality disorders, although these researchers may be detecting the relationship's idealized phase. Though we are here considering different variables (BPO and borderline personality disorder), the inconsistency demonstrates the convolutedinternal representations of self and others. It perhaps indicates the significance of splitting, primitive idealization, devaluation, and ambiguity tolerance, and raises a question about the extent to which it might be assessed in the kind of study reported here, where patterns are based on a one compound relational episode presented in the participants' self-narrative. Although Diguer and colleagues (2001) generally found more similarities than differences between personality organization levels, the current research suggests that the clinical intuitions, according to which patients with different disorders have different patterns of interpersonal relations, are neither groundless nor unreasonable. Moreover, the means for conceptualizing the "relationship pattern" may be the deciding factor. Relationship patterns, as considered here, deal with the concurrence of wish, response from self, and response from the other, which is quite unique. However, the question still remains concerning the the relation between personality organization levels and relationship patterns, and to what extent this relation is valid and reliable. It would seem promising to verify whether the patterns involved could be considered as core and repetitive (see, for example, the prototype narrative: Goncalves et al., 2002) and to further explore the patterns in clinical practice.

The BPO group also seems to be a more diversified group than the others (though not significantly: $chi^2(4) = 6.0$, $p = 0.199$), when the different relationship patterns are considered. This is not entirely consistent with the previous findings on the rigidrelationship

patterns in this group (see, for example, Diguer et al. 2004; Drapeau, Perry, 2004). Perhaps the diversification is rather interindividual than intraindividual, and dominant and/or stereotypical relationship patterns might still be found in BPO.

Deficits in the object representation complexity, which characterise several personality disorders, also seem to be related to borderline personality organization. Object representation complexity – noted here as spontaneously generated utterances which consider others' minds while narrating about an important relationship – might be seen as a good correctness predictor in distinguishing IPO from NPO, and IPO from BPO. Complex object representation contributes the opportunity to treat other people as humans with their own psychological realities. It may serve in IPO individuals as a mental tool for organizing experience with others in meaningful and coherent ways (perhaps serving regulatory functions). This is impossible in people with BPO, who have split representations of self and others, and difficult for people with NPO, who have to protect themselves from unwanted impulses, guilt feelings, and the anticipation of punishment, all of which makes integration harder (see Kernberg, 2004).

Limiations and conclusions. This study is exploratory, and as such, its results must be interpreted with great caution. Its limitations include the small sample size and the low statistical power to detect differences between the three groups, and to predict proper classification. Future studies will also need to evaluate the measurement of object representation complexity variable as it was applied here, as well as the relationship patterns, because my study has only used the CCRT cluster-inspired method, and not the entire CCRT coding procedure.

Nonetheless my preliminary findings are in general agreement with previous work on personality organization levels using the original CCRT method (Drapeau, Perry, 2004), and they are consistent with the general notion that patients with different disorders have different internal relationship patterns. I support the thesis that relationship patterns might be related to personality organization levels, and that object representation complexity might be a good predictor of psychological health – especially for distinguishing IPO and NPO from BPO. The empirical validation and clinical significance of the findings that I have derived now need to be researched.

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Posttraumatic growth following the death of someone close – the role of temperament and resiliency

Abstract:

This study investigates the role that temperament and resiliency play in posttraumatic growth among people who have experienced the death of someone close. Seventy-four participants completed a series of questionnaires measuring posttraumatic growth, using the Posttraumatic Growth Inventory, resiliency by the Resiliency Assessment Scale, and temperamental traits using the Formal Characteristics of Behaviour – Temperament Inventory. The respondents' ages ranged from 21 to 74 years (M=38.4; SD=15.5), with 63.5% being women. Most participants had lost a parent – 37.8%. Results reveal that increased appreciation for life and improved relations with others are the most prevalent areas of posttraumatic growth.

Findings suggest that posttraumatic growth is more likely to be determined by resiliency defined as skills gained from coping with various difficult events rather than biologically determined temperamental traits.

Keywords:

posttraumatic growth, resiliency, temperament, bereavement

Streszczenie:

Podjęte badania miały na celu ustalenie roli temperamentu i prężności psychicznej w potraumatycznym wzroście u osób, które doświadczyły śmierci bliskiej osoby. Analizie poddano wyniki badań 74 osób, które wypełniły następujące narzędzia badawcze: Inwentarz Potraumatycznego Rozwoju, Skalę do Pomiaru Prężności oraz Kwestionariusz Temperamentu - Formalną Charakterystykę Zachowania. Wiek badanych mieścił się w zakresie 21-74 lat (M=38.4; SD=15.5). Kobiety stanowiły 63.5% badanych. Najwięcej spośród badanych (37.8%) doświadczyło straty rodzica. Wśród analizowanych czterech obszarów wzrostu po traumie większe zmiany dotyczyły doceniania życia i relacji z innymi niż zmian w percepcji siebie i zmian w sferze duchowej. Uzyskane wyniki badań sugerują, że wzrost po traumie wynikający ze śmierci bliskiej osoby jest w większym stopniu zdeterminowany prężnością, definiowaną jako zdolność nabywana w wyniku radzenia sobie z różnymi trudnymi sytuacjami niż biologicznie uwarunkowanym temperamentem.

Słowa kluczowe:

wzrost potraumatyczny, prężność, temperament, żałoba

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Introduction

Death of someone close and posttraumatic growth

The death of someone close is a potentially devastating experience that can lead to various negative outcomes, including intense grief, anxiety, longing, and guilt feelings. However, many people also report some positive transitions resulting from bereavement, called posttraumatic growth (Tedeschi, Calhoun, 1996). The authors refer this phenomenon to the existential approach and assume that posttraumatic growth (PTG) results when cognitive processes are engaged such as changes in one's self-understanding and in the world involving their deeper understanding and making sense out of what happened. The mechanism underlying PTG is connected with cognitively restructuring information, reconstructing cognitive schemes, seeking meaning of the event and its importance for one's future functioning (Tedeschi, Calhoun, 1996, 2007). Tedeschi and Calhoun (2007) assume that PTG does not result from actually experiencing the trauma, but rather results from the undertaken coping strategies.

Research conducted by Shuchter and Zisook (1993) showed that 42% of the bereaved participants indicated positive changes two months after losing someone close, whereas Felcyn-Koczewska, Oginska-Bulik (2012) reported that 33.7% of their respondents indicated high, 38.6% average, and 27.7% low positive change levels. A study reported by Hogan, Greenfield & Schmidt (2001) showed that bereaved individuals experienced increased PTG. Higher positive emotion levels and spiritual development, and increased personal strength levels were also found in Kim, Kjervik, Belyea, and Choi's study (2011). Among parents who have lost a child, PTG was related to more positive beliefs regarding self-worth and seeing themselves as more characteristically fortunate (Engelkemeyer & Marwit, 2008); and with increased spirituality, religious beliefs, and benefit-finding, that is, a desire to help and show compassion for others' suffering (Lichtenthal, Currier, Neimeyer & Keesee, 2010).

Resiliency and posttraumatic growth

The term resiliency is defined as the ability to bounce back from unpleasant life events, which allows more effective coping with daily stress and negative emotions. Resiliency, treated as a personality characteristic, is expressed by persistence and flexible adaptation to life demands, the ability to take remedial actions in difficult situations, and tolerance of negative emotions and failures. A resilient individual is characterised by emotional stability and perceives difficulties as an opportunity to gain new experiences (Oginska-Bulik, 2013, Oginska-Bulik, Juczynski, 2008; Semmer, 2006).

A positive relationship between resilience and PTG, especially in changes relating to others, new possibilities and personal strength, was found in a group of motor vehicle accident survivors (Nishi, et. al 2010). Similarly, Polish studies (Felcyn-Koczewska, Ogińska-

-Bulik, 2011; Felcyn-Koczewska, Ogińska-Bulik, 2012, Ogińska-Bulik, 2014) showed a positive relationship between resiliency (treated as a personality characteristic) and PTG.

On the contrary, Levine and colleagues (2009) found a negative relationship between resilience, defined as the ability to adapt to new conditions without having adverse consequences in one's psycho-social life, and PTG in a group of people experiencing horror in war. Moreover, resilience conceptualized and measured by lack of PTSD symptoms following adversity was inversely associated with PTG (Tedeschi, Calhoun, 2004; Westphal, Bonanno, 2007).

Due to different conceptualisations of the term in literature, namely, the process (resilience), and the personality characteristic (resiliency), the relationship between resilience/y and PTG is not clear. Some authors equate resilience with PTG (Westphal, Bonanno, 2007). Others assume that PTG is a form of resiliency (Johnson et al. 2007), whereas still others assume that a benefit from trauma is something more than resilience and therefore plays a superior role (Lepore, Revenson, 2006). Tedeschi and Calhoun (1995) clearly distinguish the two concepts, emphasizing that development following trauma results from a transformation. They stress that resilient individuals do not necessarily have to experience PTG, as not all traumatic events are subjectively identified as challenging.

The inconsistencies in previous studies investigating a relationship between resilience and PTG suggest a need for further research. In order to address the issues from previous research, this present study adapts Tedeschi and Calhoun's (1995) approach, which treats resilience and PTG as two independent phenomena. Moreover, the study defines resiliency as a personality characteristic rather than a process.

Temperament and posttraumatic growth

Temperamental traits are rather formal behavioural characteristics, no matter what this behavioural content or direction is (Strelau, Zawadzki, 2005). Their contribution to behaviour is especially evident when individuals are confronted with stressful demands, including participation in traumatic events. In a study conducted by Strelau & Zawadzki (2005) temperamental traits such as emotional reactivity and perseveration were positively related to PTSD, whereas briskness and endurance – negatively. Briskness and endurance act as buffers lowering the trauma-inducing effect. In turn, emotional reactivity and perseverance act as augmenters increasing the effect of a trauma. Furthermore, emotional reactivity appeared to be the best predictor of PTSD's intensity. Strelau & Zawadzki (2005) stress that briskness and endurance, which are related to rather chronically decreased activation levels, share some common variance with extraversion; whereas emotional reactivity reveals a positive relationship to neuroticism, which in turn is negatively related to posttraumatic growth.

To date, there are no studies indicating the role of temperament in PTG development. Therefore, the present study addresses the following research questions: What is temperament's role and resiliency in PTG? Which dimensions, if any, of resiliency and temperament can predict PTG? What is the relationship between temperament and resiliency? Based on previous research on temperament and PTSD, one may expect that temperamental traits are also related to PTG. It is hypothesised that briskness, endurance and activity are positively related to PTG, while emotional reactivity and perseveration relate negatively. However, emotional reactivity is expected to be the strongest predictor. Figure 1 presents the model of the study.

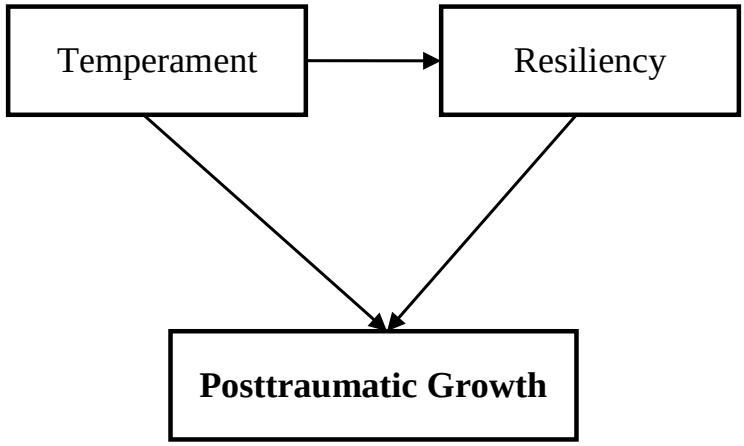

Figure 1. The relationship between temperament, resiliency and posttraumatic growth.

Method

Participants and Procedure

The study investigated the role that temperament and resiliency play in developing positive changes following the death of someone close. Eighty-four persons who experienced such an event were recruited by mail solicitation and through an announcement at the University of Lodz. The research project was accepted by the local Ethics Commission. A majority of the respondents were invited to complete a series of questionnaires at the university, and the other respondents completed questionnaires at home and returned them to the university. The eligibility criteria were as follows: the deceased person was both close and loved (a parent, a spouse, a child, a sibling or a very dear friend). Additionally, in cases of parental deaths, the age of the examined person was not more than 50. A death had to be unexpected, and had to occur no sooner than three months before and no longer than three years prior to the start of the examination. Taking into account the above, eight participants did not meet the criteria, and two persons did not complete the questionnaires. Thus, the analysis was conducted on 74 participants. The age ranged

from 21 to 74 years (M=38.4; SD=15.5), with 63.5% being women. The majority of the participants lost a parent – 37.8%. Among the remaining: 21.6% lost a child, 18.9%, a spouse or a partner, 10.8% a sibling and 10.8% a very close friend.

Materials

The following techniques were used in the study: the Polish adaptation of the Posttraumatic Growth Inventory (PTGI), the Formal Characteristics of Behaviour–Temperament Inventory (FCB-TI) and The Resiliency Assessment Scale (SPP-25).

The Posttraumatic Growth Inventory (PTGI) developed by Tedeschi and Calhoun (1996) is the most frequently used and best-validated questionnaire to assess positive changes in the aftermath of a trauma. It contains 21 items (i.e. "I changed my priorities about what is important in life") rated on a Likert-type scale from 0 ("I did not experience this change as a result of my crisis") to 5 ("I experienced this change to a very great degree as a result of my crisis"). Higher scores indicate higher posttraumatic growth levels. The Polish adaptation of PTGI (Oginska-Bulik, Juczynski, 2010) comprises the following four factors: Factor 1. Changes in self-perception – from having experienced trauma a person notices new opportunities and perceives growth in personal strength; Factor 2. Changes in relating to others – a greater sense of relation to others, increased empathy and altruism; Factor 3. Greater appreciation of life – life philosophy changes, priority changes, greater appreciation of everyday life; Factor 4. Spiritual changes – better understood spiritual problems and an increase in religiosity. Internal consistency measured by Cronbach's alpha for the full scale is high – 0.93 (for particular factors from 0.63 to 0.87). Test-retest reliability after two months is also high (0.93; 0.74, respectively).

Temperament was assessed by the Formal Characteristics of Behaviour–Temperament Inventory (FCB-TI) developed by Zawadzki and Strelau (1997). It includes 120 items (i.e. "If I sleep shorter than normally I feel distorted and tired the following day.") to which a respondent answers YES (1) or NO (0). Higher scores indicate higher levels of a particular temperamental trait. FCB-TI has been shown to be a reliable technique (Cronbach's alpha from 0.75 to 0.85) and comprises six scales: 1. Briskness – tendency to react quickly, to keep at a high tempo in performing activities, and to shift easily in response to changes in the surroundings from one behaviour to another; 2. Perseveration – tendency to contribute and to repeat behaviour or experience emotions after a stimuli evoking this behaviour or emotion has ceased; 3. Sensory Sensitivity – ability to react to sensory low stimuli ; 4. Emotional Reactivity – tendency to react intensively to an emotion-generating stimuli, expressed in high emotional sensitivity and in low emotional endurance; 5. Endurance – ability to react adequately in situations demanding long-lasting or highly stimulating activity and under intense external stimulation; 6. Activity – tendency to undertake highly stimulating behaviours or to supply by means of behaviour strong stimulation from the surroundings.

The Resiliency Assessment Scale (SPP-25) by Oginska-Bulik and Juczynski (2008) measures resiliency treated as a personality characteristic. It consists of 25 items (i.e. "I undertake actions to deal with problems no matter how difficult the problems are.") rated from 0 (definitively not) to 4 (definitively yes). Factor analysis revealed five factors: determination and persistence in actions (1), openness to new experiences and a sense of humour (2), competencies to cope with and tolerate a negative affect (3), tolerance of failures and treating life as a challenge (4), and optimistic life attitude and ability to mobilize in difficult situations (5). SPP-25 is a reliable tool: Cronbach's alpha = 0.89; internal stability (measured after 4 weeks) = 0.85.

Results

To establish the differences among mean values of the variables, a t-test was used (for two groups) and F-one way of Anova with the Tukey-test (for more than two groups). Relationships between variables were assessed using Pearson correlation coefficients. Regression analysis (forward stepwise) was used to find posttraumatic growth predictors.

Prevalence of posttraumatic growth, temperamental traits, and resiliency

The means and standard deviations for all analysed variables are presented in Table 1.

Table 1. Means and standard deviations of analysed variables.

Variable	M	SD	Min	Max
Posttraumatic growth – total	58.86	20.21	1	92
1. changes in self-perception	21.89	9.96	1	74
2. changes in relations to others	21.97	7.42	1	41
3. appreciation of life	9.94	3.39	2	15
4. spiritual changes	5.05	2.95	0	9
Briskness	13.39	4.61	3	20
Perseveration	12.45	3.57	1	19
Sensory sensitivity	14.75	3.32	4	19
Emotional reactivity	11.58	4.11	4	20
Endurance	8.64	4.58	0	19
Activity	7.62	4.46	0	17
Resiliency – total	65.61	14.67	36	97
1. determination and persistence in action	12.98	3.08	3	18
2. openness to new experiences and sense of humour	14.02	2.36	10	20
3. competencies to cope and tolerance of negative affect	13.00	3.98	5	20
4. tolerance of failures and treating life as a challenge	13.36	3.20	4	19
5. optimistic life attitude and ability to mobilize in difficult situations	12.23	4.17	4	20

Notes: M - Mean, SD - Standard Deviation, Min - Minimum Value, Max - Maximum Value.

Normative data developed for the PTG Polish version (Oginska-Bulik, Juczynski, 2010) indicates that the examined group presented average level posttraumatic growth (Sten score = 5), while 39.2% revealed low, 35.1% average and 25.7% high. Positive change levels (M=58.86) were similar to levels obtained by individuals who experienced other adverse life events, such as a spinal cord injury – (M=59.86, p<0.08), mastectomy (M=60.44, p<0.07), cardiological surgery (M=60.7, p<0.07), or a serious illness of a child (M=60.01, p<0.08) (Ogińska-Bulik, Juczynski, 2010).

Changes levels in particular posttraumatic growth dimensions were also examined. In this case, the each mean was divided by the number of items loading each factor. Higher levels of changes were observed in appreciation for life (M=3.31) and relationship to others (M=3.14), than in self-perception (M=2.43) (t=7.29 p<0.001; t=6.54 p<0.001) and the spiritual sphere (M=2.52; t=4.73 p<0.01).

Temperamental traits levels were similar to normative data obtained by Zawadzki & Strelau (1997) (M=14.30; 12.63; 14.79; 11.72; 8.63; 8.87, respectively). The levels of resiliency were lower than levels obtained in normative data (M=72.3 for men and M=69.45 for women). According to the norms developed for SPP-25 (Oginska-Bulik, Juczyński, 2008), the obtained mean corresponds to the lower limit of sten 5 and indicates an average level of resiliency.

Gender and age differences in posttraumatic growth

Gender was related to the posttraumatic growth levels. Higher levels of positive changes were observed in women than men (M=62.31; SD=18.46 and M=52.85; SD=21.53; t=1.99 p<0.05). The differences mainly denote changes in relations to others (M=23.81; SD=7.10 and M=18.77; SD=6.99; t=2.94 p<0.01) and appreciation for life (M=10.57; SD=3.06 and M=8.85; SD=3.70; t=2.15 p<0.05), both significantly higher in women. Gender was not related to resiliency levels or any temperamental traits. Participant age did not differentiate posttraumatic growth levels (M=60.34; SD=22.49 for younger and M=56.50; SD=15.22 for older participants), and the levels of resiliency (M=66.78; SD=15.46 and M=63.67; SD=13.31 respectively) but was related to two traits of temperament. Older participants presented higher sensory sensitivity levels (M=15.89; SD=2.94 and M=12.93; SD=3.13; t=4.06 p<0.001), and activity in comparison to younger participants (M=8.52; SD=4.11 and M=6.14; SD=4.64; t=2.29 p<0.05).

Type of loss and posttraumatic growth

The relationship between types of loss and levels of positive changes was checked using ANOVA. Posttraumatic growth means are shown in Table 2.

Table 2. The relationship between the types of losses and posttraumatic growth levels.

Type of loss	Posttraumatic growth	
	M	SD
1. Spouse (n=14)	60.4	14.3
2. Parent (n=28)	64.5	19.4
3. Child (n=16)	43.5	15.7
4. Sibling (n=8)	78.8	9.5
5. Close friend (n=8)	47.3	21.2

Notes: M - Mean, SD - Standard Deviation.

Results indicate a relationship between the type of loss and posttraumatic growth level. Persons who experienced a parent's or sibling's death revealed higher levels of positive changes compared to individuals who lost a child. Moreover, a brother's or sister's death seemed to lead to a higher posttraumatic growth level than did the death of a close friend ($2>3$, $p<0.01$; $3<4$, $p<0.001$; $4>5$, $p<0.01$). Loss of a child or a very close friend was related to the lowest posttraumatic growth levels.

Relationship between analysed variables

In the next step, Pearson's correlation coefficients were calculated to check the relationship between analysed variables. Data is presented in Tables 3 and 4.

Table 3. Pearson's correlation coefficients between temperament and resiliency and posttraumatic growth.

Temperament and Resiliency dimensions:	PTG total	F.1	F.2.	F.3.	F.4.
Briskness	0.07	0.14	-0.14	0.27*	0.06
Perseveration	-0.09	-0.21	0.05	-0.05	0.07
Sensory sensitivity	0.07	0.09	0.13	-0.12	-0.01
Emotional reactivity	-0.12	-0.27*	0.16	-0.18	-0.10
Endurance	0.16	0.18	0.07	0.25*	0.19
Activity	0.08	0.14	-0.04	0.19	-0.07
Resiliency – total	0.42**	0.48***	0.14	0.49***	0.34**
1. determination and persistence in action	0.43***	0.46***	0.19	0.43***	0.37**
2. openness to new experiences and sense of humour	0.25*	0.22	0.08	0.34**	0.33**
3. competencies to cope and tolerance of negative affect	0.46***	0.52***	0.20	0.51***	0.33**
4. tolerance of failures and treating life as a challenge	0.22	0.36**	-0.08	0.29*	0.14
5.optimistic life attitude and ability to mobilize in difficult situations	0.42***	0.48***	0.14	0.49***	0.34**

Notes: F.1 – changes in self-perception; F.2 – changes in relations to others; F.3 – appreciation of life; F.4 – spiritual changes, *p < .05, **p < .01, ***p < .001.

As shown in Table 3, resiliency was positively related to posttraumatic growth. The strongest relationships have been found between resiliency and its subscales, and changes in self-perception and appreciation of life. The relationship between resiliency and spiritual changes was weaker, whereas there was no association between resiliency and changes in relations to others. The following resiliency factors revealed moderate relationships with PTG: determination and persistence in action (F.1), competencies to cope with and to tolerate negative affect (F.3), and an optimistic life attitude and ability to mobilize in difficult situations (F.5).

Temperament was poorly associated with PTG. There was no significant relationship between temperament dimensions and posttraumatic growth–total. Among temperamental traits only emotional reactivity was negatively correlated with changes in self-perception, whereas briskness and endurance were positively correlated with appreciation of life.

Table 4. Pearson's correlation coefficients between temperament and resiliency.

Temperament dimensions:	Resiliency total	1	2	3	4	5
Briskness	0.52***	0.45***	0.32**	0.61***	0.36**	0.45***
Perseveration	-0.10	-0.11	0.05	-0.21	0.03	-0.09
Sensory sensitivity	-0.20	-0.20	0.03	-0.20	-0.19	-0.22
Emotional reactivity	-0.52***	-0.34**	-0.37**	-0.59***	-0.44***	-0.47***
Endurance	0.32**	0.11	0.15	0.44***	0.20	0.39**
Activity	0.35**	0.06	0.24*	0.43***	0.39**	0.33**

Notes: 1. determination and persistence in action; 2. openness to new experiences and sense of humour; 3. competencies to cope and tolerance of negative affect; 4. tolerance of failures and treating life as a challenge; 5. optimistic life attitude and ability to mobilize in difficult situations, *p < .05, **p < .01, ***p < .001.

Temperament was significantly related to resiliency, especially to two of its factors: briskness (positively) and emotional reactivity (negatively). They were related to all dimensions of resiliency; however, the strongest relationship was found with competencies to cope, and tolerance of negative affect. Resiliency was correlated to a moderate degree with endurance and activity, while there was no significant relationship between resiliency and perseveration and sensory sensitivity.

Predictors of posttraumatic growth

In order to investigate posttraumatic growth predictors among persons who have lost someone close, a multiple regression analysis series (step-wise) was performed for the total scale of PTG and for each individual PTG factor. Resiliency and temperamental traits were simultaneously entered into the model of regression. The final results are presented in Tables 5-6.

Table 5. Predictors of posttraumatic growth total – regression analysis results.

Predictors	**Beta**	**R^2**
Resiliency 3: competencies to cope and tolerance of negative affect	0.61	0.23
Temperament: Briskness	-0.42	0.07
Resiliency 4: tolerance of failures and treating life as a challenge	-0.31	0.05

Notes: $F(6.67)= 7.72$ $p<0.001$; $R=0.62$; $R^2=0.39$.

Two dimensions of resiliency (3 & 4), and briskness as a temperamental trait were found to be significant posttraumatic growth predictors (see Table 5). They explained 35% of the total variance in the dependent variable. The most significant predictor was resiliency factor three (competencies to cope and tolerance of negative affect), which explains 23% of variance. The relationship between resiliency and posttraumatic growth seems to be quite complex. In line with the expectations, competencies to cope associated with tolerance of negative affect are positively related with PTG; however, tolerance to failures and treating life as a challenge are negatively correlated. Therefore, it may suggest that proneness to tolerating failures does not necessarily promote positive changes after traumatic events. Briskness appeared to be a weak predictor (negatively related), as it explains only 7% of the total PTG variance.

Table 6. Predictors of posttraumatic growth dimensions – regression analysis results.

Predictors of changes in self-perception	**Beta**	**R^2**
Resiliency 3: competencies to cope and tolerance of negative affect	0.43	0.26
Temperament: Briskness	-0.39	0.05
Notes. $F(6.67)=7.58$ $p<0.001$; $R=0.63$; $R^2=0.40$		
Predictors of changes in relations to others		
Temperament: Emotional reactivity	-0.30	0.11
Resiliency 4: tolerance of failures and treating life as a challenge	-0.60	0.09
Temperament: Briskness	-0.46	0.05
Notes. $F(8.65)=4.74$ $p<0.01$; $R=0.60$; $R^2=0.36$		
Predictors of appreciation of life		
Resiliency 5: optimistic life attitude and ability to mobilize in difficult situations	0.45	0.26
Notes. $F(4.69)=8.63$ $p<0.001$; $R=0.58$; $R^2=0.33$		

Predictors of spiritual changes		
Resiliency 1: determination and persistence in action	0.39	0.13
Resiliency 4: tolerance of failures and treating life as a challenge	-0.49	0.07
Notes. $F(5.68)$ $p<0.001$; $R=0.54$; $R^2=0.29$		

The most significant predictor of positive changes in self-perception was factor three of resiliency – competencies to cope and to tolerate a negative affect, which explains 26% of the dependent variable. The second predictor, briskness, explains 5% of the variance and was negatively related to PTG. Each remaining variable that was included in the model explained less than 5% of the variance.

Two temperamental traits: briskness and emotional reactivity, and factor four of resiliency appeared to be significant predictors of positive changes in personal interrelations. They explained 25% of PTG variance. All are negatively related to changes in relations to others. Each of the remaining variables: three resiliency factors: determination and persistence in action (factor one), openness to new experiences and sense of humour (factor two), and competencies to cope and to tolerate a negative affect (factor three) and two temperamental traits – endurance and sensory sensitivity – explained less than 5% PTG variance.

An optimistic life attitude and the ability to mobilize in a difficult situation were significant predictors for appreciation of life. None of the remaining variables – resiliency three and four, and emotional reactivity – predicted changes in appreciation of life significantly.

Two resiliency factors: determination and persistence in action, and tolerating failures and treating life as a challenge were found to be significant spiritual changes predictors, the former being positively, and the latter negatively related to spiritual changes. The remaining three factors included in the analysis have not been found to be significant spiritual changes predictors.

Discussion

The examinees, all of whom experienced a negative life event such as the death of someone close to them, are prone to revealing positive changes, although to varying degrees. Of the participants 39.2% revealed a low level (score range: 0-53), 35.1% average (54-72) and 25.7% high (73-105) of posttraumatic growth. Higher changes level occurred in appreciation for life and relations to others, in comparison to changes in self-perception and the spiritual sphere. Moreover, no participant stated a lack of positive change in the trauma's aftermath.

The results in this study are congruent with data obtained from another group who experienced losing someone they loved, where 27.7% manifested low, 38.6% average and 33.7% high levels of posttraumatic growth (Felcyn-Koczewska & Ogińska-Bulik, 2012).

Resiliency seems to play a more significant role in developing positive changes after experienced trauma than temperament does. The results revealed a moderate relationship between resiliency and all posttraumatic growth dimensions, apart from relations to others. The strength of relationships for self-perception and life appreciation was medium, and small for spiritual changes. The strongest relationship between posttraumatic growth and temperamental traits (medium strength) revealed itself in determination and persistence in action (F.1), competencies to cope with and tolerate a negative affect (F.3), and an optimistic life attitude and ability to mobilize in difficult situations (F.5).

The above data suggest that resiliency can facilitate positive changes in the aftermath of trauma. However, it is also possible that successful coping with traumatic events resulting in posttraumatic growth might enhance the level of resiliency, especially a belief in coping skills. Data of multiple regression analyses revealed various roles of resiliency in developing positive changes in individuals who experienced the death of someone close. Competencies to cope and tolerate a negative affect (factor 3 of resiliency) appeared to be predictors of total posttraumatic growth and changes in self-perception. Tolerance to accept failures and treat life as a challenge (factor 4) has been found to be a predictor (negatively related) of changes in relations with others, whereas an optimistic life attitude and ability to mobilize in difficult situations (factor 5) has been found to be a predictor of changes in the appreciation of life. Finally, determination and persistence in action (factor 1) and tolerance of failures and treating life as a challenge (factor 4) have been found to be predictors of spiritual changes. It should be emphasized that the predictive power of the factors comprising resiliency was varied. Factor three possessed the highest predictive power in competencies to cope and to tolerate negative affect (self-perception), and factor five in optimistic life attitude and ability to mobilize in difficult situations (appreciation of life). Each explained 26% of the dependent variable's variance.

A higher change levels in self-perception and life appreciation could be seen as the outcome of successful coping with negative life events; therefore, competencies to cope associated with tolerating a negative affect seem to play a very significant role. It is also possible that these two posttraumatic growth factors can be, at least partially, treated as a form of resilience. However, this hypothetical explanation needs further investigation.

Unexpectedly, one factor resiliency: tolerating failures and treating life as a challenge, has been found to be a negative predictor in two posttraumatic growth dimensions, namely changes in relations to others and spiritual changes. The results suggest that high failure tolerance along with a tendency to perceive life as a challenge can inhibit rather

than facilitate these types of positive changes following a traumatic event. It is possible that improvements in relations to others and changes in the spiritual sphere, or generally speaking changes in life philosophy, require greater sensitivity, reflection, emotional engagement and possibly stronger processing of the trauma.

The study also showed that temperament was poorly associated with positive changes. Emotional reactivity was negatively correlated with changes in self-perception, while briskness and endurance were positively correlated with appreciation of life ($p<0.05$).

Briskness and endurance also allow for predicting positive changes after a negative life experience; however, to a slight extent. Both traits have been found to be predictors (negatively related) of positive changes in relations to others. Additionally, briskness was a predictor of positive changes in self-perception and total posttraumatic growth. A negative relationship between emotional reactivity and total posttraumatic growth was very likely, whereas the negative association between briskness and positive changes in relations with others was not congruent with the expectations. Emotional reactivity also allows one to predict PTSD symptoms (Oniszczenko, 2010; Strelau and Zawadzki, 2005). Additionally, emotional reactivity is a trait that shares essential variance with neuroticism, which is negatively related to growth after trauma (Linley and Joseph, 2004). In turn, briskness, expressed in tendency to react quickly, to keep at a high tempo in performing activities, and to shift easily in response to changes in the surroundings from one behaviour to another, should rather increase the probability of positive changes occurring after a traumatic event, especially since briskness was positively related to life appreciation, and to resiliency and all its factors. Moreover, results from Strelau and Zawadzki's study revealed (2005) that briskness was negatively related (but weakly $p<0.05$) to the PTSD level. However, the participation of briskness in predicting posttraumatic growth is small (7%). The negative relationship between briskness and PTG may be explained by the fact that the tendency to react quickly and to keep in high tempo in performing activities do not facilitate processing trauma or delaying a process that modifies cognitive schemas, which is necessary to create a new vision of the world along with positive changes in the trauma aftermath. Posttraumatic growth requires time and the ability to reflect, which is not necessary sustained by briskness.

Interestingly, temperamental traits appeared to be weak predictors of posttraumatic growth, but on the other hand they are rather strongly related to resiliency. Briskness is positively, and emotional reactivity negatively related to all dimensions of resiliency. The strongest relationships were found between temperament, and competencies to cope and tolerate a negative affect. Endurance and activity were related to resiliency to a moderate degree, whereas there was no significant relationship between perseveration and sensory sensitivity and resiliency.

The more significant role of resiliency, compared to temperament, in experiencing positive changes after negative life events indicates that posttraumatic growth is more likely to be determined by skills gained from coping with various difficult situations rather than from biological determinants. Therefore, predispositions to experience positive changes in the aftermath of a trauma might be developed and shaped during life.

The study has delivered new data about positive changes after traumatic events and their relationship with individual human characteristics. However, its limitations should also be considered. Firstly, the sample size was small and the participants experienced various types of loss, which could act as a confounding variable. Secondly, the study's cross-sectional design cannot fully reveal causality. PTSD symptoms or trauma related stress were not measured; so it is difficult to say whether the death of a loved one was really a traumatic event for all participants. The positive changes were assessed using a self-reported questionnaire; therefore, the impact of the social approval variable on the effect size should be considered. People may have a tendency to make false claims that changes have occurred. Their declaration may be the effect of imagination, wishful thinking, illusion, or serve to raise self-esteem. In order to increase the objectivity for assessing positive changes following trauma it would be useful to incorporate other measurements, such as additional assessments made by someone close to the respondent or as Linley & Joseph (2004) suggest, physiological measures of hormone secretion in response to a traumatic event.

It would also be useful to assess coping strategies and social support, which are regarded as factors promoting positive effects after traumatic events.

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Prejudice reduction in an educational setting. Practical outcomes from theoretical approaches

Abstract:

Our paper reviews research studies that have investigated interventions aimed at prejudice reduction. The theories and research results are summarized in the following categories: intergroup contact, social identity, and categorization. The intergroup contact approach inspired such techniques as contact hypothesis, jigsaw classroom, Pettigrew's model, contact with transgression, and imagined intergroup contact hypothesis; while social identity gave the ground for common ingroup identity and crossed categorization theories. We place special emphasis on methods applicable for a school setting, and try to answer the questions: when, why and under which condition will a given method work.

Keywords:

intervention, prejudice reduction, decategorization, recategorization, intergroup contact

Streszczenie:

Artykuł jest próbą przeglądu teorii oraz badań dotyczących skuteczności interwencji zmniejszających uprzedzenia wobec członków stereotypizowanych grup. Przedstawione metody i techniki oddziaływania wywodzą się z teorii kontaktu międzygrupowego oraz teorii tożsamości społecznej i kategoryzacji. W artykule opisane są następujące techniki zmiany uprzedzeń: hipoteza kontaktu, klasa mieszana, model Pettigrew, kontakt z transgresją oraz hipoteza wyobrażonego kontaktu wywodzące się z teorii kontaktu międzygrupowego, a także teoria wspólnej tożsamości grupowej i skrzyżowanych kategoryzacji społecznych, które mają swoje korzenie w teorii tożsamości społecznej i kategoryzacji. Szczególny nacisk położony jest na te metody, które można zastosować podczas zajęć szkolnych. Artykuł jest także próbą odpowiedzi na pytania które techniki, w jakich warunkach i kontekstach edukacyjno-społecznych przynoszą najlepsze efekty.

Słowa kluczowe:

interwencja, redukcja uprzedzeń, dekategoryzacja, rekategoryzacja, kontakt międzygrupowy

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Introduction

Psychological literature on prejudice and stereotypes is rich and comprehensive when it comes to theories and measurement strategies or assessment tools. But practical applications are less far-reaching. The study of prejudice, as we would have thought, attracts special attention as researchers try to find the remedy for problems existing in every society, such as discrimination, violence, exclusion, and inequality. This goal is shared by policymakers, non-governmental organizations and educators who try to introduce interventions aimed at prejudice reduction in troublesome regions, multi-ethnic workplaces, schools or neighbourhoods. With this objective in mind, having another look at effective ways to reduce prejudice seems natural and practical. Our review is one of many to raise this question. Earlier works have presented reviews within a particular context, for instance, in age groups (Abond, Levy 2000); in a laboratory (Wilder, 1986); as a specific theory concerning models of extended contact; as crossed categorizations (Mullen, Migdal, Hewstone 2001); as cognitive, motivation processes (Piper-Dąbrowska, Sędek, 2006); or concerning common intergroup identity (Gaertner et al., 1993). Our review differs from previous ones as it embraces a hypothesis and findings on prejudice reduction which may be practically and effectively implemented in a natural educational context. It also assumes that there are certain factors and conditions which reduce prejudice concerning outgroup members (Kofta, 2004). We are going to have a closer look at studies and interventions which may, if properly implemented, contribute to positive changes in attitudes towards outgroup members. We will also analyse interventions aimed at related social phenomena as stereotyping, intolerance or discrimination. All these will be referred to as "*prejudice*" for the sake of clarity. By prejudice reduction we mean a causal outcome of intervention (laboratory or natural setting) which reduces the prejudice level.

Intergroup approach

Prejudice-reduction techniques that use the intergroup approach are grounded in the idea that people have a strong, automatic tendency to divide the social world into "we" and "they". This tendency evokes perceptions and behaviours that favour the ingroup "we" relative to others. Two major lines of thinking connected with the ingroup-outgroup approach have inspired techniques which by manipulating within social categorization are aimed at diminishing prejudice. One line presents techniques derived from the contact hypothesis (Allport, 1954), the other from social identity and categorization theories (Tajfel, Turner 1979; Park, Rothbart, 1982; Turner, 1985). It is important to note that both lines share such common notions as personalization or decategorization. Other,

more integrated techniques take a lot from both areas. Looking at multiple conflicts around the world, in our own country or even within school classes, we can notice a common link and trace the immediate reasons for intergroup differences: in race, ethnicity, nationality or other countless bases for group distinctions. It is significant to understand and follow the way we classify ourselves and others along social criteria as it has a great importance when it comes to social contact within intergroup contexts. Since Allport's (1954) writings, categorization has become an important part in exploring people's perceptions of social reality and in finding explanations for stereotyping, prejudice and discrimination. Such understanding may facilitate alleviating social conflicts as it gives the possibility for modifying some aspects of categorization. Important questions arise: Could this knowledge be used in practice as an attempt to improve intergroup relations? Could it curtail violent conflicts, and decrease the exclusion of ethnic minorities or underprivileged social groups? Some approaches in social categorization research may offer a potential for reducing prejudice, especially those focusing on "ingroups" and "outgroups" in real, complex social contexts, of increasingly multicultural world. Categorization involves sorting similarities and differences instinctively, spontaneously and reflexively so that individuals can effectively process great amounts of information and reach generalizations (Bruner, 1957). The need to simplify the life's challenges forces people to constantly and reflexively categorize others according to salient categories such as gender, race and age (Brewer, 1979). Automatic evaluation linked with categorization uses information connected with current categories rather than any personal characteristics. This is caused by a lifetime of exposure to stereotypes and prejudices which provide us with deep associations (Van Bavel, Cunningham, 2009). These associations are activated while meeting members of outgroups (Devine, 1989) and influence behaviour even when people declare openness and tolerance (Gaertner, Dovidio, 2000). Research on prejudice shows that cognitive processes activate automatic racial and ethnic biases despite egalitarian values. Race and ethnicity prove to be salient and difficult to overcome (Park, Rothbart, 1982) while other social categories as occupation or appearance may be easier, but not so easily, to suppress (Hewstone et al., 1991). Our disposition to divide the world into *us* and *them* even when distinctions are unimportant and arbitrary and to favour ingroup members was shown in a series of classic studies where participants randomly assigned to groups allocated more money to fellow ingroup than outgroup members (Tajfel et al., 1971). The troubling picture which emerges from those studies is that automatic intergroup bias can occur even in the absence of socially acquired stereotypes and prejudice. Clarification of those processes which link categorization with ingroup favouritism and outgroup discrimination comes from two theoretical frameworks: social identity theory (Tajfel, Turner, 1979) and Doise's theory (Doise,

1978). The first states that individuals want to achieve a positive self-concept which could come from positive evaluation of their own group. This positive evaluation can be gained after having compared their own group with relevant outgroups. When this comparison is favourable for their own group, it brings a positive self-concept for the individual, but as a consequence discriminates against other groups. Doise's theory points out that intergroup categorization accentuates perceived differences between the groups and similarities within the groups. Categorization has a double effect on our perception: it can trigger social evaluation, even if there are no stereotypic characteristics assigned to the evaluated object or group membership, or it can make cognitive structures (stereotypes) accessible by encoding characteristics linked to the category in our memory (Hamilton, 1981). As Zarate and Smith (1990) indicate, there is a gap in the theoretical picture of social categorization. Multiple social categorizations are possible for any individual target and all are correct from a certain viewpoint, but the determinants of which classification is being used in a specific social context and situation are largely unknown. The numerous ways for categorizing people determine which stereotype will be applied, and influence both emotional and behavioural reactions towards the categorized object. Some research has shown that perceivers categorize ingroup and outgroup members differently, which strongly suggests that the chosen category depends on the perceiver's attention, attitude and mood (Park, Rorhbart, 1982). That explains the tendency to view ingroup members as more diverse than the outgroup's. Social identity theory (Turner, 1985) states the significance of the perceiver's own category membership as mediator of the categorized effects on interpersonal evaluation. Zarate and Smith (1990) in their studies looked at the initial hypothesis about the determinants of social categorization, based on target and perceiver characteristics. The findings confirmed that female targets were categorized more quickly by sex and males by race. The subject's gender category influenced the way categorization was performed as same-sex targets went more quickly than opposite-sex targets. Thus social categorization depends clearly on the target's characteristics and on ingroup-outgroup dynamics, which includes the perceiver's self-categorization. Furthermore it was confirmed that social categorization predicts stereotyping, measured by the attribution of stereotypic characteristics to the targets. More recent experiments (Kurzban et al., 2001) used a memory confusion paradigm to investigate a category where race is unrelated to group membership. When group membership (other than race) was made visually salient, participants used it more than race to categorize individuals. Although exposure to this salient group coalition was only brief, it became more powerful and decreased race-based encoding. This research emphasized the dynamic nature of social categorization and offered a method for stereotype reduction and biases in the outgroup member's evaluations. It was confirmed by research

(Crisp et al., 2006) which indicated that automatic categorization and evaluation are sensitive to social contexts, including a salient social category. It is important to notice that the salient social category for multicategorizable targets moderates the activation on attitudes. The series of experiments carried by Mitchell, Nosek and Banaji (2003) found that categorizing Black athletes and White politicians according to race activated preferences for White politicians, while categorizing the same targets according to their occupation activated preferences for Black athletes. Van Bavel and Cunningham (2009) obtained interesting results which suggest that automatic evaluations were highly sensitive to social contexts, reflecting existing intergroup configurations even when there were no visual differences between ingroup and outgroup members (i.e. race, ethnic features). These results show the possibility that categorizing with a fairly unimportant group may overrule an automatic evaluation based on race or other visually salient categories – those that usually are associated with stereotypes, prejudices and discrimination. Taken together, these results raise the possibility that a shared group identity, even minimal and temporary, may lead people to have positive feelings about individuated ingroup members – who were outgroup members according to other categorizations. Although these results seem promising for the idea of manipulating categories in order to diminish the readiness to stereotype, the nature of categorizing multicategorizable targets in social contexts still remains unclear.

Intergroup Contact Approach

Contact hypothesis

Allport (1954) postulated that intergroup contact reduces prejudice only if it is qualified by four conditions: equal status within the contact situation, common goals, intergroup cooperation, and visible support from the authorities. The intergroup contact hypothesis has been tested with different participants, methods and targets and has received much support. Among those most convincing and worth mentioning are Cook's (1978) railroad studies. Cook stimulated the interracial workplace (under the optimal contact hypothesis) by hiring racially prejudiced, white adults to work with black "co-workers" who were research confederates. At the end of the study and several months later participants rated their black co-worker highly in attractiveness and competence. It is important to note that this research was conducted in the American South in the 1960s; a place and time with very strong racial discrimination.

Jigsaw classroom

Not much later in 1971 the newly desegregated schools of Austin, Texas, faced a crisis of violence between ethnic groups. African-American youngsters and Hispanic youngsters

found themselves in the same classrooms for the first time. This led Eliot Aronson (1978) to develop a classroom technique called the jigsaw classroom. It was based on the contact hypothesis with the overall aim being to defuse inter-group tensions and promote self-esteem. The idea was to create an interdependent atmosphere that made each student in the class an important source of information so that success depended on every child's contribution (Aronson, Patnoe, 2011). In this way children learned to value and respect each other. Such an activity must be carefully designed; it is not enough to instruct the students to sit together, share work and be nice to each other. A lose situation will not make the jigsaw classroom work but must follow the rules of contact hypothesis and take under consideration potential obstacles such as dominant or slow students, bright students working faster and becoming bored, and students who have been trained to compete. Authors in social psychology have repeatedly pointed at the jigsaw classroom (Aronson et al., 1978) as a potential method for lessening prejudice at school. However, the suggested effect of jigsaw on prejudice is not well documented, or rather the presented effects of multiple experiments are ambiguous. Evidence from American studies (Aronson, Blaney, Stephin, Sikes, & Snapp, 1978) reveals that students from jigsaw classrooms show decreased prejudice and stereotyping, in comparison with children in traditional classroom settings. They also come to like other students both within and across groups. In an Australian study (Walker, Crogan, 1998) the subjects were 103 children in grades four to six, in two separate schools. The experiment investigated the influence of jigsaw classroom conditions on cooperation, interdependence and attitude. The results revealed that the jigsaw classroom produced improvements in academic performance, peer friendliness, and racial prejudice. Two quasi-experiments conducted in Norway (Bratt, 2008) investigated effects of the Jigsaw classroom on intergroup relations with 11 year-olds and 13–15 year-olds. Both studies explored the development of attitudes, intergroup friendships and empathy in the majority members' outgroup but could not confirm that the jigsaw classroom affected intergroup relations.

Pettigrew's reformulated model of contact hypothesis

Some researchers (Pettigrew, 1998) pointed out the imperfections of the contact hypothesis technique arguing that the list of conditions become incoherent, that the causal direction between contact and prejudice reduction is rather equivocal, and that the contact effects may not last over time due as other social influences mitigate prejudice reduction and generalizations from individuals to the outgroup as a whole. Aiming to overcome those flaws Pettigrew (1998) modified the contact hypothesis by incorporating three contact models: decategorization (Brewer, Miller, 1984), salient categorization (Hewstone, Brown, 1986) and recategorization (Gaertner et al., 1989). Pettigrew pointed out that decategorization should be introduced at the beginning of intergroup contact; people

should interact as individuals without paying attention to group membership. Later, categorization should be made salient with interactants aware that they belong to different categories so they can learn to appreciate differences. As a final point, recategorization should be initiated along with a superordinate level of categorization in which interactants share a group membership. According to Pettigrew the superordinate level is supposed to cause a maximum reduction in stereotypes. Eller and Abrams (2004) designed longitudinal field studies to test Pettigrew's reformulated model. The results point to the importance of intergroup friendship and emphasize the mediating role played by acquiring information about the outgroup and generating affective ties. A recent meta-analysis of 515 contact hypothesis studies has confirmed the principle proposition: there is a strong, highly significant, negative relationship between contact and prejudice (Pettigrew & Tropp, 2006). Although successful, contact theories, even those reformulated and improved, have been criticised for their practical limitations as they still seem too restricted by too many conditions and guidelines.

Temporal categorization as conditions of effective intergroup contact

A possible alternative to the approaches presented above, which are based on perspective-taking, is a technique for intergroup contact introduced by Bilewicz (2006). He suggested basing contact on intergroup transgressions by convincing participants to consider the perspective of an outgroup member before or during contact. The imagined membership in the outgroup should bring about outgroup member personalisation (perceived similarity), common group identity, and salient group boundaries. Bilewicz's participants were young Jewish students who came to Poland for *"The March of the Living"*. The students were asked to engage in contact with Polish students and talk about becoming Polish and moving to Poland (conditions with transgression) or about Jewish cemeteries (conditions without transgression).The control group did not talk with Polish students. The results were very promising: contact with transgression caused reduced prejudice in comparison to the contact without transgression and control conditions. Although successful and quite feasible in an educational setting, this method has one serious limitation. It can be used only when actual, positive contact between group members is impossible. There are, unfortunately, situations when for different reasons chances for contact do not exist, but strong prejudice does. This happens when groups are highly segregated – physically or socially, or when there is no motivation or possibility to cooperate, or meet.

Imagined intergroup contact hypothesis

We do not lack examples where group members cannot interact positively with one another - Green Line in Cyprus, West Bank Wall in Israel, multicultural communities with little opportunity for meaningful contact, homogeneous countries like Poland with its

Roma minorities living excluded and distant from society. This was the motivation behind the development of an indirect intergroup contact form: an imagined intergroup contact hypothesis. This approach is considered by some researchers (Crisp, Turner, 2009) as a simple and effective instrument for intergroup attitude change. Imagined intergroup contact is a mental interaction simulation with a member or members of an outgroup. Positive contact experience triggers notions associated with successful interactions with other group members and leads to improved outgroup attitudes and reduced stereotyping (Allport, 1954). Imagination is a powerful and accessible tool. People can imagine almost every social situation and context; so it seems tempting for psychologists, educators and teachers to use this power to encourage prejudice reduction. The value of imagined contact is its ability to encourage people to develop more positive feelings towards outgroup members and to seek out (or stop avoiding) contact in real life. Studies (Turner et al., 2007) show that young participants who imagined a scenario in which they participated in a short positive interaction with an older person revealed less ingroup bias in evaluations. In the second study, researchers focused on heterosexual men's attitudes toward homosexual men. Heterosexuals who imagined talking to a homosexual on a train subsequently evaluated homosexuals in general more positively and stereotyped them less than participants who imagined a neutral scene. Research has also shown that positive imagined contact leads to projecting positive traits to the target outgroup (Stathi, Crisp, 2008). Nonetheless, this technique has certain limitations. As it is less direct than face to face contact, its effect on attitudes is weaker and more temporary. But it might be said that if real contact is impossible, the results brought by imaginary contact are "better than nothing." It is also crucial to note that imaginary contact may have an impact on future interactions and encourages people to seek contact with outgroup members. In that way a vicious circle of negative attitudes can be broken. It could be very useful for schools as teachers could develop and apply teaching techniques that encourage contact imagery to bring students from different groups closer together. Imagined contact is believed, on the basis of experimental results, to be able to provide a simple and practical means of introducing social psychological content into educational interventions. It can be used either alone or in combination with other methods and techniques.

Social identity and social categorization

Being aware of the battle line between different groups, researchers use different approaches in order to temporarily erase that line, change its course, cross it with other lines or draw it in another place so that it becomes less significant. Decategorization, recategorization, or crossed categorization can be used as separate strategies for prejudice reduction (Crisp, Hewstone, 2007) or as integrative models (Gaertner, Dovidio, 2000). In the decategorization approach, a participant's individual identity is stressed

over group membership. It can be achieved through instruction from the teacher or researcher. For example, in quite a successful anti-prejudice intervention (Popiołek, Wójcik, 2012), we instructed our students to concentrate on personal contact with different outgroup members by imagining and describing everyday activities with them. Participants in a study by Bettencourt et al. (1992) were less likely to favour their own, temporary group after working cooperatively with temporary outgroup members and focusing on individuals. Conditions promoting an interpersonal orientation during contact reduced prejudice between experimentally created categories more than contact under task oriented conditions. Recategorization strategy encourages participants to favour outgroup members the same as ingroup members as they think of people from a different group as part of one superordinate group. In their experiment Gaertner and Dovidio (2000) used shirts of the same colour or shared prizes as an integrated setting. In an educational context designing an incorporated situation as either real or imagined is relatively easy and can be designed as an interactive activity during history, geography or language lessons.

Crossed categorization techniques

As mentioned before an impressive number of experiments support the claim that the merely categorizing people into two distinct groups is sufficient to weaken intergroup discrimination, for example, in favouring the ingroup at the expense of the outgroup (Brewer, 1979; Rabbie,1982). The modern theory of crossed categorization is based on the assumption that if category boundaries are not convergent, but cross each other, the position of outgroup member will divert from "out" to "in". (Vanbeselaere, 1987; Crisp & Hewstone, 2001). Crisscrossing category memberships form new sub-groups with ingroup and outgroup members changes who is "in" and who is "out". This may lead to decategorization – reducing earlier categorization scheme and emphasizing similarities and perceiving outgroup members as individuals. According to Vanbeselaere (1987) crossed categorization may lead to convergence between categories and divergence within categories. Doise (1978) states that this process may reduce or eliminate discrimination, but it hasn't been proven so far. Research exploring the effect of crossed categorization on inter-group bias hasn't provided conclusive answers whether it could be an effective way to reduce intergroup bias. Some results are promising (Diehl, 1990; Crisp, Hewston& Rubin, 2001) and show that if categorization is performed within five or more categories, decategorization, convergence and divergence are possible to be achieved. Quite a few different studies have examined crossed categorization effects on intregroup bias (Mullen et al., 2001). In most cases crossed categorization crosses two dichotomous dimensions, resulting in four groups: the double-ingroup, the double-outgroup and two mixed groups. The double ingroup refers to people who share membership

in both dimensions, the double-outgroup to those who do not share membership in any given dimension, while the mixed group shares only one dimension but remains the outgroup according to the remaining one. In experimental studies (Brown, Turner, 1981; Crisp, Hewstone, 2007; Vanbeselaere, 1987) the basic pattern of intergroup evaluation is that the double ingroup receives most favourable evaluations while the double outgroup is evaluated most negatively. Most commonly, prejudice against a novel group is diminished when it is crossed with another novel group category in minimal group paradigm experiments (Brown, Turner, 1981). The problematic point is that laboratory interventions – those considering changes in evaluation and prejudice reduction – are abstracted from a real-world context. In some experiments (Deschamps, Doise, 1978) it could be observed that crossed categorizations eliminated intergroup discrimination on evaluations and attitudes only directly related to an experimental task. Contrary to this experiment Vanbeseleare (1987) reduced intergroup discrimination in crossed categorization conditions not only for evaluating the experimental situation but also for the more general evaluative question. The Vescio and Judd (2004) study shows that intervention based on crossed categorization can change the perception of group boundaries but does not necessarily reduce out-group bias. More promising results were presented by Mullen et al. (2001), namely that crossed categorization hostility-reduction intervention may reduce or redirect, but not eliminate, the bias . This lends support to the suggestion that the salient social category and its strength are difficult to recapture in experimental conditions. Real life categories do not have an equal psychological power and are placed in a complex social context. Therefore mixed findings from the crossed categorization technique suggest that it could be used in education intervention only as a way to blur boundaries in order to prepare students for further prejudice reduction. Very few field experiments have been planned to implement and test crossed, integrated, recategorization, or decategorization strategies developed in laboratories. There are, however, some exceptions as Nier and others (2001) conducted a study carried on in the classroom. After intervention, the students were slightly more likely to favour drawings of cross-sex or cross-race children. This integrated approach was tested in a natural school setting during a program introduced in primary schools (Weigl, Łukaszewski, 1992). The program's aim was to change negative ethnic and national stereotypes during regular lessons. In the experiment various techniques as interaction, common goals, personalization, cross categorization, recategorization and decategorization were used in lesson scenarios. After the program the opinion about tested national groups improved and declared social distance shortened.

Common in-group identity model

An alternative approach – the common in-group identity model (Gaertner et al., 1993) – is rooted in the social categorization perspective of intergroup relations (Tajfel, Turner 1979; Park, Rothbart, 1982; Turner, 1985). It emphasizes the important social category perception role in creating and reducing intergroup attitudes (Doliński, 2001). It offers the possibility to reduce prejudice by influencing the ways in which members of different groups comprehend and think of group boundaries. Introduced recategorization establishes an alternative, superordinate social category to embrace both ingroup and outgroup members. If the two separate group members are encouraged to conceive of themselves as a single, superordinate group rather that separate groups, attitudes toward former outgroup members will be more positive through processes governing pro ingroup bias (Tajfel, Turner 1979). Inducing one group representation extends all motivational and cognitive processes toward the former outgroup member. It encourages open communication and self-disclosing interactions, which can lead to personalization and individualization (Stephan, 1985; Wilder, 1986). In the recategorized group, new members benefit in many ways. They receive more favourable evaluation and more generous awards. Moreover, information about former outgroup members are processed, stored and activated as if they were ingroup members (Deutsch, 1973). Bilewicz's research (2009) conducted in a high school in a borderland Polish-Czech community found that many forms of ingroup favourism disappeared when students were encouraged to take a broader perspective. Polish students were instructed to imagine becoming members of an outgroup, which increased their willingness to help outgroup members. Recategorization can be achieved by introducing factors that are perceived as shared in any way by members of two groups (e.g. a common goal, common tasks, beliefs or perspective taking); so a new subordinate identity is formed without abandoning former identities. Allport (1954) stated that concentric identities can enclose each other so that two groups are perceived within one superior group. A revised common identity may be generalized to outgroup members who are absent in contact situations. This generalization is most likely to occur if the salience of the initial group identities is maintained within the superordinate common group identity (Geartner, 1994). Such categorization within the ingroup has been demonstrated to produce more positive evaluations (Brewer, 1979) and a perception of greater belief similarity (Brown, 1984), improve memory for positive information about former outgroup members (Howard, Rothbart, 1980), and reduce ultimate attribution error in intergroup causal attributions (Hewstone, 1990). A very important contribution was made by Dovidio and colleagues (1998) in a study demonstrating further support for the common in-group identity model where the more inclusive group mediates the relationship between intergroup contact conditions and the reduction bias.

The results also show that conditions stated by the contact hypothesis (Allport, 1954) are positively related to superordinate representations. As the research shows, the common ingroup identity model provides an integrative framework for practical and effective educational interventions to reduce prejudice. We have adopted this framework along with the imagined contact hypothesis and cross-categorization techniques to create an anti-prejudice educational intervention conducted during English language lessons (Popiołek, Wójcik, 2012). Participating in our study were 60 boys and girls aged 16/17, all students of the Secondary School of Fine Arts in Katowice. The idea behind conducting this intervention was its universal character and the ease with which it could be implemented into the foreign-language lesson curriculum. The intervention's overall goal was to emphasize the diversity of outgroup members and intergroup similarity by encouraging the students to transform the membership's cognitive representation from two groups into one group. In order to achieve this, we designed thirty lesson scenarios incorporating various English language activities. Crossed (multiple) categorization was applied as a baseline for the program's first part in order to weaken students' intergroup representation and to trigger reducing prejudice. In various language exercises, we asked students to imagine and visualise different social and national categories crossing each other; to place themselves in different categories according to the applied categorization scheme; and to describe every day activities of outgroup members (socially distant) in order to see how social categories overlap and how, in many cases, the same categories are shared. In several activities segmental participation in multiple groups was emphasized. The intervention program's second part was based on the premise that intergroup bias and conflicts could be diminished by employing lesson scenarios which would encourage students to transform their cognitive representation of membership from two groups to one group. We attempted to accomplish this by presenting positive cooperative interactions and designing tasks which brought out interdependence in pursuit of common goals and an appreciation of diversity. We asked students to imagine positive contact and interaction with outgroup members in order to design a detailed plan of cooperation aimed at achieving a common goal. The results of this study were promising as following the intervention students included more social groups to the "my group" (we) category and fewer social groups to the "outgroup" (they) category. What is significant is that more students declared reduced social distance to most of the evaluated groups, including Roma – the most heavily stereotyped and discriminated ethnic group in Poland. The intervention program cannot be regarded as a "one-step" solution for intergroup bias, since the changes in student group boundary perceptions and distance toward outgroup members were only declarative, which is an obvious limitation of this study. However, the results show that intervention clearly prompted positive intergroup changes;

so it can be regarded as one of the multilateral campaigns conducted in schools. It is also important to note that a language-course setting provides various possibilities for attitude-changing intervention as every activity requires a text or speech with some kind of content in order to practice language skills. If activities promoting social values, diversity or cooperation meet all methodological requirements, they can be very easy to implement; teachers do not require any additional training and the class setting remains unchanged. If positive change is triggered, it may have a positive impact on openness and contact-readiness with outgroup members, which is particularly important for young people in Poland. As Boski (2009) states, the positive experience that foreigners have in Poland is mainly based on interpersonal relations and entrance into a personalized context where hospitality, kindness and other positive values are activated.

Discussion

The review of theories, research and practice demonstrates the great variety of techniques which can be successfully introduced into an educational setting and act as a prejudice reduction intervention. Linking education, social psychology and teaching methodology can lead to developing easy-applicable, effective, school-class based interventions. The intervention techniques should be context-linked and must consider both social-cognitive constraints supporting prejudice and educational background. Several factors must be taken under consideration: the kind and strength of prejudice, possible interactions with outgroup members, the way prejudiced attitudes are manifested, opportunities for contact, and the educational system. Tailoring intervention to fit the context and turning techniques into methodologically correct class activities may enable us to build a more realistic and better integrated model of prejudice reduction. While planning an intervention it would be very rational to derive from already existing ones. Cultural competence training has been highly successful in promoting openness and preparing for intergroup contact. Such training (Boski, 2009) explores and teaches about cultural differences and focuses on those which influence separation of groups in order to open communication across the barriers. More traditional programs, embedded in school reality, attempt to improve attitudes by presenting students with interesting details about outgroup members. The multicultural educational program *"TAK"* (Weigl, 1999) is an example of a successful, integrated educational path which resulted in positive changes in opinions on ethnic groups, mainly those who suffer stigmatisation in Poland – Jewish and Roma. The great variety of techniques, methods, theories and practices clearly indicates that further work is needed to explore their practical implementation into a school setting.

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The nestling – waiting for adulthood?

Abstract:

Our article deals with the problem of 'nestlings' – young adults who postpone the moment of entering adulthood. A brief review of data and research results indicates that delays in undertaking developmental tasks typical of adulthood refer to a professional job, starting a family or a relationship, and gaining independence (not only financially). We discuss cultural, economic and psychological contexts of nestling, and attempt to answer the question whether waiting for adulthood is a global problem or a problem specific to only certain countries or just to Poland. It seems necessary to undertake research on this phenomenon. Nestling ought to be explored not only from the adult child' perspective but from the parental perspective as well.

Keywords:

waiting for adulthood, global problem, economic reasons, cultural and social reasons, psychological reasons, explorative research, adult children, parents of adult children

Streszczenie:

Artykuł zajmuje się problemem "gniazdowników" - młodych dorosłych, którzy odraczają moment wejścia w dorosłość. Krótki przegląd danych i wyników badań wskazuje, że opóźnienia w podejmowaniu zadań rozwojowych typowych dla dorosłości odnoszą się do pracy zawodowej, założenie rodziny, budowania związków, uzyskania niezależności, a nie jedynie względów finansowych. Artykuł omawia kulturowy, ekonomiczny i psychologiczny kontekst gniazdowania oraz próbuje odpowiedzieć na pytanie, czy czekanie na dorosłość jest problemem globalnym, specyficznym dla niektórych krajów czy problemem dotyczącym tylko Polski. Niezbędne wydaje się podjęcie badań nad omawianym zjawiskiem. Gniazdowanie powinno być zbadane z punktu widzenia dorosłych dzieci oraz ich rodziców.

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Słowa kluczowe:
czekając na dorosłość, problem globalny, przyczyny ekonomiczne, przyczyny kulturowe i społeczne, przyczyny psychologiczne, badania eksploracyjne, dorosłe dzieci, rodzice dorosłych dzieci

Introduction

Young people nowadays grow up in conditions which in many respects are definitely different from those in which their parents or grandparents lived and – first of all – as many researchers point out, their living conditions now are much simpler and quieter. They have better opportunities to get a good education, to master foreign languages or to travel abroad. They do not have to fight or protest. They can spend their free time working on their own development, gaining new experiences and pursuing their careers. It would seem that they have been perfectly prepared for adult life on their own. Nonetheless, more and more often they resign from independence and remain 'under their parents' wings'. In other words: 'Young people enter something I call orange jelly. They wade through apprenticeships and voluntary work. As many as 60 % of them, as long as they want to earn an income, work on so-called "junk" contracts for the lowest possible wages. As a result, most of them function in their family homes living off their parents. They are so-called "nestlings" (Szlendak, 2012).

The name nestlings has its origins in a species of birds – nestlings (*altricial species*), whose chicks after hatching are incapable of living independently and thus require parental care; therefore they spend a longer time in their nests – longer than other species (http://encyklopedia.pwn.pl/haslo/;3906210). In a similar way to ornithologists, sociologists define nestlings as follows: They are 'children who having reached the age of 30 or even 40 do not start their own families, do not move out, and remain with their parents; they continue using parental care and resources' (Szlendak, 2012, 294). Bee (2004) defines this type of family relationship as the 'cluttered nest'. In the literature, we find many descriptions and research results referring to this phenomenon all over the world. Hence, we can conclude that waiting for adulthood or postponing or delaying adulthood applies not only to Poland.

A tendency to postpone fulfilling adulthood obligations is not new. According to Sińczuch, the first reports about shifting the border of growing up appeared in the late 1970s. (Dubas, 2001). Young people started professional work and reached economic independence or adulthood later than usual. Most often it was connected with starting further stages of education. Nowadays, however, we can observe that this phenomenon has been spreading to a greater extent than ever before.

Young people today definitely remain financially dependent on their parents more often and longer than their peers from a previous generation and to a greater extent they take advantage of their parents' material support. The time spent in getting an education necessary for joining the labour market has become much longer, while the deepening economic crisis and hard housing situation additionally hinders entering adulthood. Moreover, this affects not only unemployed people, those looking for work, or those who study but also those who have jobs, pursue their careers, who own flats (quite often their parents bought them their flats). An individual ' (...) does not have (...) possibilities to acquire appropriate social capital which would enable him to fulfil adulthood obligations' (Czerka, 2005).

In Poland 'almost three million adults still live together with their parents, still as children. Is it a special case of laziness, reasonable calculation or a social tragedy?' (http://www.polityka.pl/spoleczenstwo/artykuly/1558917,1,pokolenie-doroslych-bobasow.read#ixzz2r2HLZFEn). To be more precise, according to CBOS (Centre for Public Opinion Research) survey, 'as many as 36% of Poles aged 25 – 29 still live with their parents and 20% still get pocket money from them. More than 25% at this age are financially maintained by their parents. Another quarter of the respondents have jobs but they need to be supported by their families anyway. Less than 50% of these people live on their own' (http://www.sfora.pl/Az-tylu-mlodych-Polakow-mieszka-wciaz-z-rodzicami-s62124/3).

What are the reasons for the phenomenon of nestling and what is it connected with? How do sociologists and psychologists perceive those young non-adult adults? Is nestling only a stage on their way towards (delayed) adulthood or is it a peculiar phenomenon? (cf. Brzezińska et al. 2011; Szlendak, 2012). What characterises Polish nestlings?

Our article deals with the aforementioned questions as well as with other issues connected with the specific character of entering adulthood at the beginning of the 21st century. We attempt to integrate data and findings coming from various sources and try to outline the phenomenon's psychological frames. We also bear in mind that the problem pertaining to Poles in Poland has rarely been tackled by researchers.

Nestling – attempt at definition

Nestling refers to various aspects of entering and experiencing adulthood in the 20th century. The most specific distinguishing feature is waiting for adulthood ('waithood'), which is a portmanteau noun consisting of two words 'wait' and 'hood'. It concerns the period of suspension between childhood and adulthood. On the one hand, young people are no longer children who require being looked after – on the other hand, though, they

are unable to become independent adults. The concept of 'waithood', used for the first time by Navtej Dhillon, Tarik Yousef and Dianne Singerman (see: Honwana, 2012), comprises the multifaceted transition from youth to adulthood. This process goes beyond economic criteria, namely, finding a job, and extends into the sphere of social life and civic activity. Tasks of this period are moved to subsequent years and they evidence changes in a life cycle. Hence, it differs in models connected with establishing a family and pursuing a career from those that existed in modern and traditional societies.

Nestlings, as mentioned before, is a notion used in Poland to describe young adults who live off their parents (Szlendak, 2012) and, as a consequence, who remain in specific relations with them, thus building their identity based on a specific social and psychological factors. We can encounter related or even synonymic concepts in scientific literature connected with the nestling syndrome. They are mostly concerned with sociology and are also in popular and popular science literature which in the media raises a social and demographic problem of living off parents. In the media, for example, we can find such terms as a 'generation of adult babies'.

The concepts connected with the issue, which often emphasise the cultural positioning of waiting for adulthood, provide a context in which this peculiar 21st century phenomenon is described – a phenomenon that, apart from Poland, can be observed in other countries in Europe, Africa, North America and in other parts of the world wherever an unemployment problem appears. Hence, waiting for adulthood ('waithood') is a global problem; Honwana even wrote about a 'generation of waiting for adulthood (waithood generation)' (Honwana, 2012).

Various countries – range of phenomenon (is the nestling a global problem?)

'Against the background of other EU states, we do not look so bad. We are far from the European average which amounts to 28.3%. Young Danes live with their parents the least frequently (merely 1.9%), followed by Finns and Swedes (4.1%). On the other hand, Slovaks (56.4%) and Bulgarians (55.7%) are much greater nestlings than Poles.' Europejskie badanie dochodów i warunków życia (EU-SILC) w 2012 r. http://stat.gov.pl/obszary-tematyczne/warunki-zycia/dochody-wydatki-i-warunki-zycia-ludnosci/europejskie-badanie-dochodow-i-warunkow-zycia-eu-silc-w-2012-r-,7,4.html.

In the USA, Canada and Great Britain young people suspended between childhood and adulthood are described by such terms as 'kidults', 'adultolescents' or 'kippers'. In Japan the words are 'freeters' or 'parasaito shinguru'. In Italy, it's the sarcastic term 'bamboccioni' and characterizes an increasing number of young people aged 20 to 30 and more

who are still single and live with their parents (in particular with mothers). In Africa (northern, eastern and western) the word 'youthman' refers to a person who is not socially adult in spite of having reached biological adulthood. Even a man older than forty can be named like this when he is unable to create a stable, independent life, and establish a family. A difficult political situation in Africa forces some young people to grow up faster (e.g. children whose parents died and who have to take care of their younger siblings, or working children, or child-soldiers). We can encounter a certain paradox here, namely, a thirteen-year-old boy who provides for his entire family is an adult, whereas a forty-year-old man who is unable to be independent financially and start his own family is young – a youthman (Honwana, 2012).

It is worth emphasizing a phenomenon called 'boomerang kids' or a 'yo-yo generation'. It refers to university graduates who (having experienced freedom and independence) on completing their studies come back home and continue being dependent on their parents. They usually do not contribute financially to their households and do not support their parents either with money or help in household jobs. Very frequently they take advantage of privileges connected with daily routines such as washing, ironing or cleaning (Sassler, Ciambrone and Benway, 2008). The phenomenon of 'boomerang kids' is very popular in the United States to such an extent that it constitutes a problem – so characteristic of this country: it influences insurance policies (referring to health, a car, etc.) of parents whose adult children are back home. They are mostly problems connected with increased living costs. No wonder that some appropriate policies were adjusted and that separate legal provisions were made in reference to children returning home (Lankford, 1999).

A factor that certainly makes it difficult for young adults to be become independent is unemployment. According to the EU statistical office Eurostat, young Europeans are faced with a worsening situation on the labour market. In many Member States the level of unemployment among young adults is constantly increasing. The worst situation can be observed in Greece (55.3%) and Spain (53.2%), where more than 50% of adults cannot find any job. Serious problems with finding employment are also encountered by young people living in Portugal (37.7%), Italy (35.3%), Slovakia (34.0%), Ireland (30.4%), Hungary (28.1%) and Bulgaria (28.1%). Although in countries such as Latvia and Lithuania unemployment has slightly decreased during recent years, it is still high – 28.4% and 26.4% respectively. A quite high level of unemployment can also be observed in Cyprus (27.8%), Poland (26.5%), Great Britain (21.0%) and Slovakia (20.6%). Germany (8.1%), Austria (8.7%) and Holland (9.5%) can boast the lowest unemployment levels in the EU among young people. Table 1 presents detailed data.

Apart from Polish 'nestlings' and Italian 'bamboccioni', in European literature on the subject we cannot find any adverse psychological consequences resulting from postponing entrance into adulthood. It would be very interesting to carry out analyses, particularly with regard to Greece and Spain. The fact that entering adulthood by young people is so difficult and common clearly shows that it has become a global problem encountered on almost every continent.

Table 1. Unemployment among young people (%).

	Youth unemployment rate				Youth unemployment ratio		
	2010	2011	2012	2012Q4*	2010	2011	2012
EU-27	21.1	21.4	22.8	23.2	9.0	9.1	9.7
Euro area	20.9	20.8	23.0	23.7	8.7	8.7	9.6
Belgium	22.4	18.7	19.8	22.0	7.3	6.0	6.2
Bulgaria	21.8	25.0	28.1	28.4	6.7	7.4	8.5
Czech Republic	18.3	18.1	19.5	19.3	5.7	5.4	6.1
Denmark	14.0	14.2	14.1	14.2	9.4	9.6	9.1
Germany	9.9	8.6	8.1	7.9	5.1	4.5	4.1
Estonia	32.9	22.3	20.9	19.3	12.6	9.1	8.7
Ireland	27.6	29.1	30.4	29.4	12.0	12.1	12.3
Greece	32.9	44.4	55.3	57.9	10.0	13.0	16.1
Spain	41.6	46.4	53.2	55.2	17.8	19.0	20.6
France	23.6	22.8	24.3	25.4	8.9	8.4	9.0
Italy	27.8	29.1	35.3	36.9	7.9	8.0	10.1
Cyprus	16.6	22.4	27.8	31.8	6.7	8.7	10.8
Latvia	37.2	31.0	28.4	24.7	13.9	11.6	11.4
Lithuania	35.3	32.2	26.4	24.2	10.4	9.0	7.7
Luxembourg	15.8	16.4	18.1	18.5	3.5	4.2	5.0
Hungary	26.6	26.1	28.1	28.8	6.6	6.4	7.3
Malta	13.1	13.8	14.2	14.5	6.7	7.1	7.2
Netherlands	8.7	7.6	9.5	9.8	6.0	5.3	6.6
Austria	8.8	8.3	8.7	8.7	5.2	5.0	5.2
Poland	23.7	25.8	26.5	27.5	8.2	8.7	8.9
Portugal	27.7e	30.1	37.7	38.4	8.2	11.7	14.3
Romania	22.1	23.7	22.7	22.2	6.9	7.4	7.0
Slovenia	14.7	15.7	20.6	23.2	5.9	5.9	7.1
Slovakia	33.9	33.5	34.0	35.1	10.4	10.0	10.4
Finland	21.4	20.1	19.0	19.3	10.6	10.1	9.8
Sweden	24.8	22.8	23.7	24.1	12.8	12.1	12.4
United Kingdom	19.6	21.1	21.0	20.7	11.6	12.4	12.4

* The quarterly youth unemployment rate is seasonally adjusted.
e: estimate

Source: Eurostat – http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/, [dostęp: 12.01.2014.]

Some reasons for nestling – economic, social, cultural and psychological

According to data published by GUS, even 50% of Poles aged 25 – 34 can have a problem with taking on characteristic adulthood tasks. Can these Poles be perceived as a generation of adult children? Is it a lack of possibilities or willingness that determines their

suspension between developmental stages? Or perhaps the tasks that are traditionally associated with this stage are not congruent with economic and social realities and psychological conditions?

Undoubtedly, among the reasons for nestling, economic issues are the most important. However, we must take into account social, cultural and psychological aspects as well. In this part of the article, we shall indicate various reasons why young adults 'nestle' so snugly into their parents' homes.

First and foremost, reasons for the phenomenon can be sought in the economic situation that young people face, not only in Poland and Europe. When analysing the Polish situation the following aspects must be taken into account: an economic crisis, high unemployment, so-called 'junk' contracts, a large number of young adults who entered or are trying to enter the labour market from the population boom beginning in the 1980s, an overrepresentation of young adults with higher education and a university diploma – all these realities make it difficult for young people to find employment and find their place on the labour market and beyond it.

According to Sheldon (2005), in Great Britain economic reasons also constitute the main cause for postponing adulthood. This author thinks that it is the labour market itself, especially work that is done as part of gaining experience with no pay, that is for free that forces young people to be so-called 'kippers' (an acronym made from *Kid in Parents' Pockets Eroding Retirement Savings*), and it has nothing to do with their laziness.

A similar opinion is held by Honwana (2012). This author, in turn, thinks that the incapability of young Africans to become independent does not result from their failure to reach adulthood (just growing up itself), but results from a breakdown in the social and economical system which ought to ensure growing up healthy, having a good education and being employed. This system should also enable young people to start their families and to participate in a social life as rightful citizens. This problem is often caused by an incorrect economic policy, bad management, corruption, and a lack of civil liberties.

In Poland many university graduates who cannot find work register in the Labour Offices as unemployed persons. In some cases, they are strongly motivated by their unemployed status to continue their development, to gain new skills and qualifications and sometimes even to take a job that is not connected with their original profession. More often, however, a young person assumes the role of a victim, someone who is helpless or even wronged by the country's economic situation (Bańka, 1992). These young people, particularly when they remain jobless for a long time, do not see the necessity to actively adapt to labour market conditions. Instead of trying to improve their professional situation, they become passive and require others to care for them (Skarżyńska, 1996).

This is conducive to nestling in a generational family, especially when parents are able to and truly want to continue caring (not only materially) for an adult child.

So how can we explain this? Some young people use their resources and creativity, actively seek employment or take up alternative forms of earning an income. Why, then, do others have so many problems with this?

There are also other nestling causes, perhaps as equally important as the economical ones and certainly interacting with them, which are connected with the contemporary social and cultural context of entering adulthood according to a 'new' post-industrial programme (Lasch, 1977).

According to sociologists, following the 'baby boom' which took place after the Second World War, and starting from the 1950s, we have witnessed sexual liberalization that has resulted in differentiating, complicating and changing family forms (cf. Szlendak, 2012). In spite of these differentiations, we can notice one common aspect, namely, a considerable decrease in the fertility rate. 'According to Eurostat figures, the fertility rate in 25 countries European Union dropped from approximately 2.5 in 1996 to about 1.5 in 2005' (Szlendak, 2012, 367). One of the most popular sociological theories, namely, a theory about a second demographic transition authored by Dutch demographer and sociologist Van de Kaa (cf. e.g. Giza-Poleszczuk, 2005) states that decreased fertility consequences go beyond demographic and sociological areas. A decreasing number of children in a family is accompanied by concentrating psychologically on an individual (Giddens, 2007). Expansive individualization and a related striving for personal freedom devoid of any limits (Beck, Beck-Gernsheim, 1995) lead to changing the so-called 'normal biography' into 'choice biography', which is further connected with privatization regarding norms, relativism of attitudes and pluralised life models (Beck, Beck-Gernsheim, 1995; Beck-Gernsheim, 2002). Hence if an individual's autonomy becomes a social and cultural priority, situated beyond any responsibility, it is possible to construct the autobiography outside typical adult tasks which contemporarily are treated as uncomfortable and requiring compromises.

It must be added that decreased fertility in Poland is connected with many factors such as popular contraceptive use, a decrease in marriages, an increase in divorces, more women going into the labour market who make careers, and self-realisation perceived beyond motherhood (Giza –Poleszczuk, 2005; Slany 2011). Fewer and fewer children in a family (mostly there is just one, and according to demographic forecasts this number will grow) are accompanied by a specific kind of 'infantocentrism' (Slany, 2007; Bartosz, 2003). In other words, the lower the number of children in a family, the greater the parental focus on a child, even when it is an adult one. This focus on a child results from the accumulated parental efforts to meet the child's needs, to organize optimal conditions

not only for learning but also for enhancing the adult child's chances in a so-called career – an adult child who, according to parents, is able – and unable at the same time – to lead an independent life.

The parents' liberal attitude towards an adults child's informal relationships and their acceptance, at least declared, of divorces are conducive to nestling or re-nestling after an 'episode' such as a marriage or another relationship which has failed. Some researchers see in these phenomena a manifestation of 'culture of egoism' (Giele, 2007) and they indicate the promotion of life concentrated on satisfying egocentric needs while bearing the lowest possible costs. Thus, nestling becomes a good option or even the best one and certainly a comfortable one. All the more, it is so when we consider that a close relationship and a family are seen by young adults as a difficult choice. Personal comfort and striving for self-realisation with no compromises made with another human being contribute to the fact that the divorce rate in Poland is one the highest in Europe (http://www.prawnik-online.eu/najnowsze-statystyki-dotyczace-rozwodow,3,3423.html; http://www.stat.gov.pl/cps/rde/xbcr/gus/RS_rocznik_stat_miedzynarodowy_2012.pdf).

Individual autonomy, so far-reaching in Poland, is conducive to building an identity based on the parent's own 'self'-expansion. Contemporary parents of adult children who exerted themselves to bring up, educate or even buy a flat for their only child, made this effort and engaged in these investments partly because they wanted to satisfy their own, sometimes unfulfilled ambitions. In this way, parents of young adults take part in a cultural and environmental 'game' in which they can emphasize their participation in their children's process of reaching 'assets' in the form of high incomes, exclusive travels and general comfort that they themselves were deprived of. All this contributes to postponing the moment of entering adulthood and consequently to delays in assuming responsibilities connected with taking up a job (especially since it is not easy to find one today), postponing starting relationships and starting their own families as well as multiplying reasons why this option is difficult or simply unattractive.

Even if we assume that gaining financial independence is conditioned by the situation on the labour market and the existing level of unemployment, we must admit that the state of close relationships in Poland – and not only in Poland – is full of contradictions and paradoxes. We must bear in mind that in our times these two basic planes (work and relationships) penetrate each other and thus they cannot be treated separately. Our private life is increasingly subordinated to a job situation, and this material status plays a more decisive role for the value of an individual work prestige and family importance than used to be the case (Giele, 2007).

Paradoxically, in the rating of values declared by young Poles, love and a happy relationship, possibly lasting, are still mentioned among the most important values. As

emphasized by Growiec in his book 'Social capital. Origin and social consequences.' (2011), Poles think that their cultural differentiator is attachment to family. 'We are at the top of the world with regard to the strength of family bonds. African countries followed by Arabic countries and then us'. (http://www.polityka.pl/nauka/czlowiek/1559705,1,nieufny-jak-polak-prawda-czy-mit.read). In the international research described by Growiec, some data was obtained confirming a high value of family in the hierarchy of Polish people. Ninety-seven percent of the respondents answered the question What is the value of family in your life? as 'it is very important'. The next question Do you think that parents should sacrifice everything for their children or do they have their own separate lives? was answered by most Polish respondents as 'parents are obliged to sacrifice everything for their children'. Therefore, we can see that declaratively, and certainly not only declaratively, Poles have a good mental background for nestling, both in the case of young adults and their parents as well.

Currently, striving towards adulthood by both adults and their parents is also connected with psychological reasons. In this place, we ought to draw attention to the complex psychological reasons for Polish nestling. If one consequence of these changes is a new model for relations between parents and children within a broader context (decreased fertility – a child becoming an autotelic value – a broader range for investing in children and caring for them, including providing for their material welfare, mental support and even a specific type of encirclement), there appears a problem with 'anchoring the identity' of young adults. Tasks which are typical of adulthood are postponed or they are not fulfilled at all (cf. Brzezińska, et al. 2011). Apart from delays in assuming an adult role and prolonging a transitory early adulthood phase, other difficulties are also indicated such as an emotional dependence on parents, an inability to be separated from them, and the fact that parents or guardians help their children out with performing certain tasks. This leads to a decrease in motivation to become an adult and a lack of working out one's own self-realisation in social roles (Bee, 2003). We also notice here cases where resigning from accomplishing economic and non-economic independence is difficult to gain, giving up responsibility for one's own life, abstaining from assuming new professional roles and family relations connected with separating from their original family.

Young people, when faced with the question about constituting their own identity, that is, how to build it? where? when? with whom? and at last what for?, may easily find a clue by taking advantage of a nest that is ready, prepared and already domesticated. On the one hand, adult non-adults have at their disposal many possibilities to choose from and may construct their own autobiography, while on the other hand a multitude and diversity of choices entails a fear of constructing a wrong one. What is more, these are frequently only apparent choices as most of them are conditioned by material aspects.

Therefore, we can see that multiple offers provided by the contemporary world and the possibility to select from various autobiographical options paradoxically lead to questions asked at the threshold of adulthood such as 'what shall I choose?', 'what is more important: career or family?', 'if work and/or relationship or family, then what kind?' and so on. Thus they often experience a 'quarter century crisis' (Szlendak, 2012, 295).

Hence taking into account the complex conditions that underlie nestling, we need to bear in mind those possible configurations of economical, social, cultural and psychological factors, including their interactive character.

Contemporary road to adulthood?

Our times has seen an increase in tolerance towards accomplishing social tasks and fulfilling social roles (Gurba, 2009). Additionally, the age of assuming obligations connected with adulthood is constantly moved higher and higher. According to Oleś (2011), entering adulthood is nowadays associated with determination of future goals and plans, making decisions to lead a single life or start a relationship with another person on a permanent basis, and the consequent performance of the assumed obligations. Emotional relations with parents are loosened and a young person starts to be independent and makes his own decisions. Moreover, a sense of responsibility combined with bearing consequences for one's own choices ought to develop. An additional criterion underlying adulthood is financial independence, which is acquired thanks to taking up a job (Oleś, 2011).

As noted previously, adulthood as tasks connected with this stage of life comprises two dimensions, namely, the objective and subjective. The objective dimension refers to social norms and phases of human life, which is determined within a chronological framework. Within this framework some tasks were formulated, the accomplishment of which is identified with entering adulthood. However, in our times we may ask whether these tasks are universal and match contemporary reality. Researchers place more emphasis on other dimensions. The subjective dimension is expressed through a sense of adulthood and psycho-social maturity. The former refers to having a strong conviction about being adult (category approach) or being adult to a certain degree (continuous approach). The latter, or psycho-social maturity, is connected with a human being's experiences who, influenced by particular events, tries to externalize particular norms and pursue a certain adulthood model. This is manifested by certain competences and behaviours attributed to adults (Brzezińska et al., 2012). Indexes of adulthood include assuming responsibility for one's own actions, making independent decisions, being able to

plan one's own activeness, having definite plans for the future, and being able to get involved in a chosen activity (Brzezińska, Appelt, Ziółkowska, 2008).

According to Arnett, people in their early adulthood do not perceive objective determinants as indispensable for being an adult (Brzezińska at al., 2012). External factors, also called individual criteria, are evaluated as the most important. Research results on the subjective sense of being an adult person indicate that taking up these adulthood tasks positively influence one's self-perception as an adult (Arnett, 2000).

It has been shown that a sense of adulthood is also strongly connected with age and an individual's existing life situation, that is, his/her level of education, taking up a professional job and being in a relationship (Piotrowski, 2010). Other authors point to a connection with assuming responsibility for consequences of one's own choices, supporting the closest relatives (mainly financially) and learning to control one's emotions (Gurba, 2008). Assuming and fulfilling an appropriate role and tasks, therefore, facilitates a sense of adulthood and has an impact on our self-perception as an adult person (Piotrowski, 2010).

Arnett suggests that in the light of current social and cultural changes, with their significant increase in individualism particularly in developed and developing societies, a new developmental phase has emerged between adolescence and early adulthood and can be referred to as emerging adulthood (Piotrowski, 2010). It lasts six to seven years – between the 18th and the 25th year of life. During that relatively short period many changes take place along with an attempt to determine one's own lifestyle. That period has as its characteristics: explorative behaviours, frequent changes, a disposition to experience something new, and to try out new styles in order to find one most appropriate for that individual. It is connected with building an identity and focusing on one's own personality (Arnett, 2000). At the same time, it is unstable as a result of numerous changes that occur in the young person's life (changing partners, taking up a professional role, discovering new interests and directions of activity).

This emerging adulthood phase can be noticed in countries in which the economy is based on science and where education and practical experience take many years in order to achieve a satisfying job and reach a desired status. Also other tasks connected with adulthood are postponed until that time. In Minta's research, a peculiar group of "apparent adults" has been identified: people that experience being suspended between adolescence and adulthood (Minta, 2007). Persons during the emerging adulthood phase perceive themselves neither as adolescents nor as adults (Piotrowski, 2010). Although a sense of adulthood does appear on some planes, is not comprehensive in character.

Many tasks associated with adulthood are connected with the economic stability of a given country. The main obstacle in reaching adult status is a lack of financial background.

According to Honwana, the incapability of young people to gain basic resources for being independent does not result from their failure to reach adulthood or to complete the growing up process, but results from a breakdown in the social and economic system, which ought to ensure healthiness, a good education, and employment. This system should also enable young people to start their families and participate in a social life as rightful citizens. This problem is often caused by an incorrect economic policy, bad management, corruption, and a lack of civil liberties. It would appear therefore that persons who have greater financial or educational resources ought to reach adulthood faster (Honwana, 2012). However, it turns out to be illusory. Many young adults, in spite of having a good education, a job and a financial background, still remain dependent on their parents.

From the perspective of adult children and parents

Taking into consideration the specific character of entering adulthood in our times, we must approach the problem from thee viewpoints of both adult children and their parents.

From the young adults' perspective, we may enumerate some specific Polish problems, namely:

- the 'cheated generation'; young people live convinced, often reinforced by the media or parents, that education, an MA degree, or even moreso a PhD, will ensure them an attractive, satisfying and well paid job as well as a better life than their parents have, including its non-professional aspects; more than once, this has turned out to an illusion;
- a lack of models; young people have thought that all the clues for functioning as a 'young adult', along with a belief that the schemes and tested models effective one generation ago could be still actual; it has turned out, however, that they no longer apply and do not meet modern requirements; this is accompanied by the lack of a constructive model for solving crisis situations and coping with life problems. Quite often, young people at home do not learn how to cope with life challenges because they are protected from them and/or are excessively helped by their parents who do so out of love. Yet another situation, is that some non-constructive models are communicated such as taking advantage of numerous benefits and pensions instead of taking up a job;
- young people being used to 'home luxury'; they are comfortable and have a commercial approach to life, they calculate, What pays off: to continue living with parents and save money or pay for everything on their own (be independent) but live modestly.

- prolonging their studies and gaining education because of the existing labour market situation and consequently avoiding and postponing confrontation with adulthood and having to assume responsibility for one's own life;
- fewer children in a family (in most families there are just two children or even only one): 'One-child families constitute 46.9% of the whole, those with two children – 36.2%, while large families (with three or more children) – 16.9%. The percentage of large families living in the country is more than twice as high (25.3%) than in cities (11.8%) (http://www.unic.un.org.pl/rok_rodziny/mi_informacja.php). There is a belief that an adult child by leaving home violates the family system; hence young adults remain in a specific dependence relation with their parents. They may experience various dilemmas connected with 'abandoning' their parents and this is often accompanied by guilt feelings and being afraid to cause a nuisance to parents. This is especially true when an adult child performs important roles by supporting, helping and constituting a family.

On the other hand, from the viewpoint of parents, nestling an adult child can be connected with diverse factors which mutually interact:

- fulfilling a 'parental obligation' which according to the Polish mentality ought to ensure 'everything' for their child; thus parents assume responsibility for their adult child's life and his 'start into adulthood in the best possible way'; currently in Poland this is often means that a young person has to have a background in the form of a flat, a high income, and professional and social status - which certainly require expenditures of strength, means and time by parents who get involved in complex relations with their children;
- anchoring mental attitudes of Polish parents (and not only e.g. Scandinavian ones) in a conviction that 'children cannot be told to pack their bags'; it is especially true in the Polish and Italian stereotype of a mother who never throws her child out onto the streets, which is often connected with controlling an adult child and preventing him from 'making wrong decisions in life';
- investing in children in order to receive a specific 'return on investment' in the future (e.g. when parents grow old or lose their jobs), which is frequently linked with a cultural tradition (for example, in Japan aging parents expect care from their children; it is similar in the Poland);
- tolerating/acquiescing/accepting various manifestations of the 'non-adult child' syndrome, for instance, in maintaining adult children because they hope to get a job or anticipation of getting a more attractive or better job, in accepting a son or a daughter living together with a partner and hoping that the relationship will be formalized (which is supported by the popularity of cohabitation among young adults, including those involving parents themselves);

- bonding a family by an adult child (as it was mentioned before, especially when an adult child performs an important family role) because when a child is gone, the parents have to look at each other anew, again as partners, which might not turn out to be an easy task;
- strengthening the parents' worthiness, which is built on 'their meaning' for a child no matter what the child's age is (conviction and confirmation that parents are still important/the most important/indispensible/necessary for an adult child because without parental help, the child would not be able to manage in this world).

In noting both the adult children's and their parent's viewpoints, it is worth emphasizing that when conducting psychological research it is necessary to compare and combine these two perspectives since they supplement each other and can be complementary (for example, parents investing in young adults is linked with 'repayment' of emotional investments by adult children). When we underestimate or ignore one of these two perspectives (either adult children or parents), the resulting picture of nestling is subjected to unauthorized reduction.

Conclusions

Problems with smoothly entering adulthood are encountered not only by young adults in Poland.

We may observe some explicit nestling that is connected with commercialization of life in its broad sense. Postponed adulthood in its Polish version has its own specific character, also in reference to psychology. However, apart from a few examples (Brzezińska et al., 2011), research on this issue is very scarce; so is our knowledge about the problems and difficulties of young adults and their parents and the emergence of new types of relations between them. Our article discusses only some aspects of delayed adulthood and nestling, taking into account mainly sociological data and selected psychological aspects.

Below we would like to indicate some significant questions which are worth further research aimed at describing – empirically by means of scientific sociological and psychological tools – the nestling phenomenon in other words, postponing and waiting for adulthood.

- What constitutes the distinguishing features of Polish nestling and how is it different from related phenomena in Europe and beyond – in the context of comparative intercultural research?

- What is nestling for parents when the 'empty nest syndrome' is challenged? What does it mean for mothers and for fathers? Is it legitimate to equally interpret being a mother or a father of an adult non-adult?
- Is a nestling daughter or son the same phenomenon? If we emphasise the varied nature of women and men waiting for adulthood by stressing differences in certain areas and similarities in others, we also ought to focus our attention on these aspects.
- What forms of Polish nestling can be distinguished? How is basic nestling (a child has always lived with parents) different from re-nestling (when adult children come back home after emigrating, losing or changing a job, or after a failed relationship or divorce)? What is the psychological status of children referred to as *boomerangs* ?
- How are relations established between those who wait for adulthood in their parents' homes and what are the areas in which problems start to appear? How can we work out a new formula of relations between an adult child and parents? When a young adult has good relations with only one parent (mother or father), what are the characteristic features of this type of nestling?

Findings in this area of study may not only constitute important psychological knowledge about entering adulthood, but they can also serve to create support programs and help systems both for children as well as for parents who experience problems connected with nestling.

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Psychometric properties of Self-Perception Profile for Children in a Polish sample[3]

Abstract:

The Self-Perception Profile for Children (SPPC) is a measure which allows one to assess children's self-concept. Our article presents this instrument's psychometric properties within a Polish sample. In our study we tested 432 elementary school students and 14 form teachers. As validity indicators we used the Teacher's Rating Scale of Child's Actual Behavior (TRS) and the average school grade for the previous semester. The Polish version of SPPC yielded good psychometric properties. The instrument's factorial structure paralleled the structure of the original version. Reliability was high both in terms of internal consistency and test-retest results. Scale validity was confirmed in the correlational analysis. Boys scored higher than girls in the Physical Appearance and Global Self-Worth subscales but lower in the Behavioral Conduct subscale. Younger children scored higher than older children in the Scholastic Competence, Physical Appearance, and Global Self-Worth subscales. Judgments on children's physical appearance were the best predictor of their global self-worth.

Keywords:

Self-Perception Profile, self-concept, self-esteem, cross-cultural validation, children

Streszczenie:

Skala Postrzegania Siebie dla Dzieci (Self-Perception Profile for Children) jest narzędziem służącym do badania obrazu siebie. Celem artykułu było przedstawienie własności psychometrycznych skali uzyskanych w grupie polskich dzieci. W badaniu wzięło udział 432 uczniów szkół podstawowych i 14 wychowawców klas. Trafność narzędzia określano poprzez odniesienie wyników uzyskanych w Skali Postrzegania Siebie dla Dzieci do wyników w Skali Oceny Zachowania Dziecka przez Nauczyciela oraz do średniej ocen uczniów z ostatniego semestru. Analizy statystyczne wskazały na

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dobre własności psychometryczne narzędzia. Struktura czynnikowa skali okazała się podobna do tej, jaką zakładano w oryginalnej wersji. Rzetelność narzędzia, określana za pomocą wskaźników spójności wewnętrznej i korelacji z wynikiem badania retestowego, była wysoka. Chłopcy uzyskali wyższe wyniki niż dziewczęta w podskalach Wyglądu i Globalnego Poczucia Własnej Wartości, lecz niższe w podskali Kontroli Zachowania. Młodsze dzieci uzyskały wyższe wyniki niż starsze dzieci w podskalach Kompetencji Szkolnych, Wyglądu i Globalnego Poczucia Własnej Wartości. Ocena własnego wyglądu stanowiła najsilniejszy predyktor globalnego poczucia własnej wartości.

Słowa kluczowe:
Skala Postrzegania Siebie dla Dzieci, obraz siebie, samoocena, adaptacja międzykulturowa, dzieci

Introduction

The Self-Perception Profile for Children (SPPC) was originally developed by Susan Harter (1985) in the United States almost three decades ago and since then has become one of the most popular and widely recognized instruments to assess children's self-concept. Cross-cultural scale validations have been prepared in Canada (a French version by Gavin & Herry, 1996) and in European countries such as the Netherlands (van Dongen-Melman, Koot, and Verhulst, 1993; Murris, Meester, and Fijen, 2002), Belgium (van der Bergh, Marcoen, 1999), Greece (Makris-Botsaris, Robinson, 1991), Germany (Asendorpf, van Acken, 1993), France (Boivin, Vitaro, and Gagnon, 1992), Finland (Miller, 2000), Spain (Pereda, Forns, 2004), Northern Ireland (Granleese, Joseph, 1993), and Scotland (Hoare, Elton, Greer, and Kerley, 1993). The scale has also been used in studies conducted in culturally distant countries like the United Arab Emirates (Eapen, Naqvi, and Al Dhaheri, 2000), and China (Wang, Meredith, and Tsai, 1996). Despite its popularity SPPC has not been validated so far in Poland.

Self-concept is a frequently studied phenomenon in the social sciences (Leary, Tangney, 2005). Although there is no single prevailing definition of this term, generally it refers to an organized set of descriptive and evaluative judgments that a person attributes to themself. Descriptive judgments take into consideration different characteristics which constitute a person's self-knowledge, whereas evaluative judgments are related to appraisal of such characteristics in the context of personal and social standards. The term "self-concept" is often used interchangeably with the terms "self-esteem" or "self-worth" since a person's judgments tend to include both descriptive and evaluative qualities at the same time (e.g. Harter, Whitesell, and Junkin, 1998; Swann, Chang-Schneider, and McClarty, 2007).

The main assumption made by the author of SPPC is that self-concept is a multidimensional construct undergoing significant structural changes in the course of development

(Harter, 1986; Harter 1990; Harter 2005). The notion regarding self-concept as a multidimensional phenomenon is common in contemporary psychology (Marsh, Seeshing, 1998; Marsh, Trautwein, Ludtke, Koller, and Baumert, 2006; Lister, Roberts, 2011). In this approach different self-domains are usually viewed as separate but correlated. Researchers who develop their own instruments a priori assume a self-concept structure which is later confirmed via factor analysis (Marsh, Holmes, 1990; Huang, 2010). Self-domains assessed by such instruments differ, depending on the theoretical basis and the aim of the research. For example, if a researcher is particularly interested in how children perceive themselves in specific academic situations one may want to test self-concept for different school subjects, whereas for other researchers it may seem more appropriate to test only the perception of general academic competence (Shavelson, Bolus, 1982). It has been demonstrated (Marsh, Craven, 2006; Vallerand, Pelletier, and Gagne, 1991) that a multidimensional approach to self-concept allows for a more accurate measurement than the unidimensional approach proposed in earlier studies (e.g. Coopersmith, 1967; Niebrzydowski, 1976).

According to Harter (2005), developmental changes in self-concept are related to the level of a child's cognitive maturity, and social experiences. Regarding cognitive abilities, the author points out the significance of the processes of differentiation and integration in constructing knowledge about one's self. In the process of differentiation children create various self-descriptions which are independently evaluated. Such self-descriptions are then integrated within higher-order generalizations about one's characteristics, for example, if a child perceives itself as good at writing, good at reading, and good at counting, it should later perceive itself as good at schoolwork or, in an even more abstract description, as smart or intelligent. The important social experiences that influence self-concept are related to the way a child is perceived by significant persons in its environment such as parents, teachers, or classmates. The amount of approval that a child receives is usually positively correlated with a child's self-evaluations. The way a child is perceived by others and by itself is mediated by social standards which may differ in some aspects for certain sexes or social groups, for example, it has been observed that girls from middle childhood evaluate their physical appearance more critically than boys. This may be explained by the different standards set for girls and boys within society (Harter, 1985; Harter, 2000).

Normative-developmental changes in self-concept occur in certain age periods (Harter, 2005). In ontogenesis the earliest judgments regarding self are observed in two to- four year-olds. Such children usually describe concrete and observable features of self which are not integrated into higher-order categories. Self-evaluations in this period tend to be unrealistically positive since children have trouble in distinguishing their

desired and actual level of competence. First higher-order generalizations in the self-concept are observed when children are on the verge of early and middle childhood. It has been shown that children aged four to seven evaluate themselves independently in two general categories. The first category-relates to their cognitive and physical competence level, and the second to their perceived social acceptance by persons in their environment (Harter, 1986; Harter, 1990). In middle and late childhood there emerges the ability to use abstract self-descriptive categories which integrate knowledge about different abilities, traits, and behaviors into a set of higher-order generalizations. Children's self-evaluations usually decrease with age and are much more positive and unrealistic in comparison to the self-appraisals given by adolescents (Oleszkowicz, Senejko, 2011).

SPPC assesses self-descriptions made by children aged 8 and older. The instrument consists of five domain-specific subscales and a global self-worth subscale (Harter, 1985). Domain-specific evaluations allow one to measure a child's self-perception in areas of 1) scholastic competence, 2) social acceptance, 3) athletic competence, 4) physical appearance, and 5) behavioral conduct. The *Scholastic Competence* subscale taps the child's own perceived cognitive abilities in a school context. The items refer to performance in schoolwork and the perception of oneself as smart. *Social Acceptance* taps the degree to which a child perceives itself as popular and liked by peers. *Athletic Competence* assesses the way a child peceives its own competence in sports and outdoor games. The *Physical Appearance* subscale taps the degree to which a child is happy with its own looks and physical characteristics such as height, weight, hair, and face. The *Behavioral Conduct* subscale allows one to assess the degree to which children like the way they behave, and whether they feel that they act the way they are supposed to and avoid getting into trouble. Finally, the *Global Self-Worth* subscale refers to the general acceptance of oneself as a person. The items in this subscale tap the extent to which a child likes itself, and whether the child is happy with its own life. It is important to notice that global self-worth in SPPC is not treated as a sum of different self-evaluations but is assessed by a separate set of statements. Such an approach comes from William James' formulation that self-esteem depends on success or failure in domains deemed important by the person. Thus, not all domain-specific evaluations are equally important predictors of a child's global self-worth. The other theoretical inspiration for Harter's instrument comes from the works of Charles Cooley, who has seen self as a social construct. From this perspective, judgments about self are influenced by the way a child is perceived by significant others, namely, parents or teachers. James's and Cooley's propositions found strong empirical confirmation in researches conducted with SPPC (Harter, 1986; Harter, 1990).

The importance of studying children's self-concept has been underlined by many authors who connect this construct to different psychological and behavioral variables.

Among other things, low global self-worth has been correlated with depression (Abela, Fishman, Cohen, and Young, 2012; Harter, 1993), with high levels of aggression and externalizing problems (Brent Donellan, Trzesniewski, Robins, Moffitt, and Caspi 2005; Diamantopolou, Rydell, and Henrickson, 2008), child body dissatisfaction (Taylor, Wilson, Slater, and Mohr, 2012), sexual abuse (Bolger, Patterson, and Kupersmidt, 1998), and difficulties in school transition (West, Sweeting, and Young, 2008). High global self-worth has been positively correlated with general life satisfaction in children (Huebner, 1991), and academic performance (Baumeister, Campbell, Krueger, and Vohs, 2003). The relation of other domain-specific evaluations to other variables was also researched. In recent studies it was shown that perceived physical appearance moderated depressive symptoms in children (Nguyen, Scott, 2011), and perceived behavioral conduct was related to externalizing problems in child psychiatric patients (De Pauw, Mervielde, De Clercq, De Fruyt, Tremmery, and Deboutte., 2009). Also, in educational psychology, domain specific evaluations were stronger predictors of school achievement than global self-worth (Bong, Cho, Ahn, and Kim, 2012; Marsh, Martin, 2011).

SPPC was originally standarised by Harter (1985) on four samples of over 1,500 children from third grade (8-9 year-olds) till eighth grade (13-14 year-olds) who attended schools in Colorado, USA. SPPC cross-cultural studies conducted so far regarding psychometric properties have in most cases clearly supported the instrument's original factorial structure, indicating that the scale accurately taps the domains distinguished by children brought up in western culture (e.g. van der Bergh, Marcoen, 1999; Boivin et al., 1992; Granlese, Joseph, 1993; Makris-Botsaris, Robinson, 1991; Miller, 2000; Murris, Meester, and Fijen, 2002; Pereda, Forns, 2004). The developmental period of tested children in cross-cultural studies usually ranged from middle childhood to early adolescence depending on the research design and educational system specifics, for example, in Belgium authors tested children 8-12 years-old (van der Bergh, Marcoen, 1999), in Spain 9-12 years-old (Pereda, Forns, 2004), and in the Dutch sample the first study included children 8-12 years-old (van Dongen-Melman, Koot, and Verhulst, 1993;), and a later study 8-14 years-old (Murris, Meester, and Fijen, 2002). SPPC's validity was assessed cross-culturally by the teacher ratings (van der Bergh, Marcoen, 1999; Boivin et al., 1992), peer ratings (Boivin et al., 1992), perceived social support scores, and the discrepancy between competence and importance scores in the different domains (Miller, 2000).

A common finding in SPPC research was sex, and age differences in self-evaluations across the domains. In the American study boys scored higher than girls in the subscales of athletic competence, physical appearance, and global self-worth, while girls scored higher only on the behavioral conduct subscale (Harter, 1985). A similar tendency has been observed in most cross-cultural research, although sometimes boys scored

higher than girls in all subscales except for behavioral conduct, for example, in studies conducted in Belgium (van der Bergh, Marcoen, 1999) or Scotland (Hoare et al., 1993); and sometimes sex differences were less striking, for example, in Spain boys' results were significantly higher only in the domain of athletic competence, and lower in the domain of behavioral conduct (Pereda, Forns, 2004). When it comes to age differences SPPC results usually confirm the cross-cultural tendency that younger children evaluate themselves higher than older children (van der Bergh, Marcoen, 1999; Harter, 1985; Hoare et al. 1993).

The objective in our current study was to investigate SPPC's psychometric properties in a group of Polish children. We decided first to examine the instrument using exploratory factor analysis. In the next step we tested the internal consistency of the subscales, intercorrelations, and test-retest reliability. We also studied the sample for sex, and age differences. To test the age differences we compared the results obtained by younger children in the second and third grades of elementary school with the results of older children in fourth to sixth grade. We assumed that comparing children in the middle childhood period with children in late childhood and early adolescence would allow us to demonstrate the decrease in self-evaluations typically observed in the course of development (Oleszkowicz, Senejko, 2011). We tested scale by using the Teacher's Rating Scale of Child's Actual Behavior (TRS), and by correlating SPPC results with the average school-grade for the previous semester. In ourfinal step, we checked which subscales would allow one to predict children's global self-worth.

Method

Participants

The sample consisted of 432 elementary school students recruited from state schools in Cracow. The participants'age ranged from 8 to 13 with a mean of 10.62 (SD=1.45). There were 206 boys (mean age=10.65 , SD=1.38) and 226 girls (mean age=10.59, SD=1.51). We also assessed 14 form teachers of the tested pupils, who completed the Teacher Rating Scale of Child's Actual Behavior for the total number of 215 students (mean age=11.36 , SD=.96) including 112 boys (mean age=11.25, SD=.98) and 103 girls (mean age=11.48 and SD=.92).

Measurement

Self-Perception Profile for Children

SPPC (Harter, 1985) enables one to test a child's self-perception in five domain-specific dimensions: 1) scholastic competence, 2) social acceptance, 3) athletic competence,

4) physical appearance, and 5) behavioral conduct, and the sixth dimension of global self-worth. All 36 items are formulated as paired opposite statements. The child is asked to decide which statement describes themself better and whether this statement is only sort of true or really true for him or her. The answers are scored on a 1 to 4 scale: where 1 represents low perceived competence or adequacy and 4 reflects high perceived competence or adequacy. The final score for each dimension is the arithmetic mean of the scores in the six items.

The SPPC version we used was translated into Polish independently by two translators. Both translations were compared and discussed by psychologists experienced in developmental research. The more suitable translation was back-translated into English by another translator. After comparing the back-translation to the original SPPC a final Polish version was established.

Teacher Rating Scale of Child's Actual Behavior

The TRS was originally published in the same manual as SPPC (Harter, 1985). The structure of both questionnaires is parallel. Teachers are asked to rate children based on their actual behavior and the situation at school in five domain-specific dimensions. A global self-worth subscale is not included because of the strictly subjective nature of these kinds of judgments. The questionnaire contains 15 items scored on a 1 to 4 scale. The final score for each subscale is calculated as a mean of the scores in three items. This scale was translated similarly to the SPPC translation.

Procedure

Our study was approved by school authorities and by the parents of the tested children. Students filled in SPPC during form periods in their teacher's presence. Those who conducted the study first briefly presented themselves and the aim of the research. Then they gave instructions on how to complete the questionnaire. Form teachers filled in the TRS for their students at school in their free time. Also, when given consent, we obtained the average grades of the tested children for the previous semester. A retest study was conducted after a month in a group comprising 60 children.

Statistical analysis

Statistical analysis was conducted using SPSS 20. In order to confirm the factor structure of SPPC we performed exploratory factor analysis with varimax rotation on 30 items representing domain-specific subscales. Items composing the Global Self-Worth subscale were not included due to the fact that global self-esteem may depend on different

domain-specific evaluations important to the child. As a next step in the analysis we tested scale reliability by assessing the α-Cronbach's coefficients and the test-retest correlations. After this we examined the intercorrelations between the SPPC subscales, and ran the t-test to explore sex differences between the means. We also used the t-test to test the age differences between younger and older children. To assess the instrument's validity we correlated the results with the teacher's ratings measured by TRS, and with the children's average grade in the previous semester. We also performed regression analysis to determine the influence of domain-specific factors on global self-worth.

Results

Factor analysis

The scree plot generated for the 30 domain-specific SPPC items indicated the final break point in the data after the fifth factor (Figure 1). These factors explained 53% of the variance (Factor 1: 24.6%; Factor 2: 10.7%; Factor 3: 7.2%; Factor 4: 5.5%; Factor 5: 4.9%). The results obtained suggested a search for a five-factor solution within the analysis. Items were attributed to the factors based on their loadings exceeding a value of .40. We discovered that the factor structure reflected the assumed SPPC structure. As presented in Table 1, high loadings grouped the items to compose the dimensions of: physical appearance (F1), scholastic competence (F2), behavioral conduct (F3), athletic competence (F4), and social acceptance (F5). It is worth noticing that there were only three items, numbers 25, 27, and 33, which had loadings exceeding the value of .30 in two separate factors. The first item "Some kids do very well at their classwork BUT other kids don't do very well at their classwork" loaded scholastic competence and behavioral conduct factors. This result may suggest that to some extent children in elementary school connect success at school with an ability to control their behavior and to act the way that is expected by adults. The second item was "In games and sports some kids usually watch instead of play BUT other kids usually play rather than watch". In this case the results indicate that children answered this item both in the context of their athletic competence and peer acceptance. Finally, the third item was "Some kids don't do well at new outdoor games BUT other kids are good at new games right away". This item was connected both to athletic and scholastic competence.

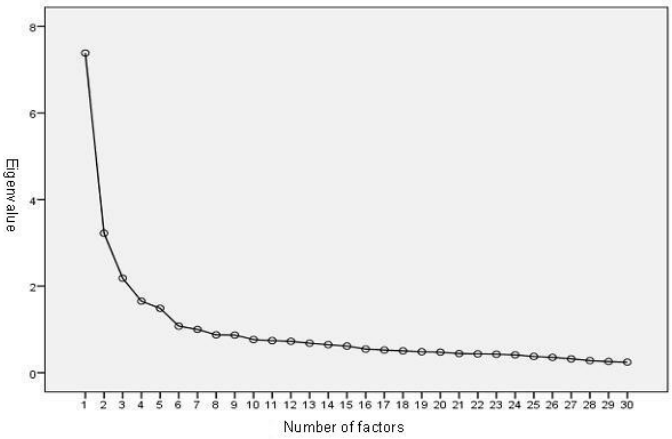

Figure 1. Scree plot of the factors representing items in the Polish version of SPPC.

Table 1. Factor loadings for the Polish version of SPPC.

	F1	F2	F3	F4	F5
Scholastic competence (Cronbach's α =.78)					
1. Some kids feel that they are very good at their school work BUT other kids worry whether they can do the school work assigned to them	.23	.70*	.17	.06	.02
7. Some kids feel like they are just as smart as other kids their age BUT other kids aren't so sure and wonder if they are as smart	.13	.65*	.11	.08	-.06
13. Some kids are pretty slow in finishing their school work BUT other kids can do their school work quickly	.06	.65*	.07	.17	.13
19. Some kids often forget what they learn BUT other kids remember things easily	.20	.59*	.23	.12	.00
25. Some kids do very well at their classwork BUT other kids don't do very well at their classwork	.10	.63*	.32	.06	.13
31. Some kids have trouble figuring out the answers at school BUT other kids almost always can figure out the answers	.09	.71*	.16	.01	.22
Social acceptance (Cronbach's α =.70)					
2. Some kids find it hard to make friends BUT other kids find it pretty easy to make friends	.06	.00	.03	.13	.71*
8. Some kids have a lot of friends BUT other kids don't have very many friends	.03	-.00	.03	.24	.72*
14. Some kids would like to have a lot more friends BUT other kids have as many friends as they want	.08	.04	-.01	-.08	.54*
20. Some kids are always doing things with a lot of kids BUT other kids usually do things by themselves	.06	-.01	.05	.20	.58*
26. Some kids wish that more people their age liked them BUT other kids feel that most people their age do like them	.13	.24	.17	.21	.63*
32. Some kids are popular with othera their age BUT other kids are not very popular	.06	.19	.13	.20	.64*

Athletic competence (Cronbach's α =.81)					
3. Some kids do very well at all kinds of sports BUT other kids feel that they are not very good when it comes to sports	.13	.09	-.06	.78*	.11
9. Some kids wish they could be a lot better at sports BUT other kids feel they are good enough at sports	.12	.01	.16	.59*	.21
15. Some kids think they could do well at just about any new sports activity they haven't tried before BUT other kids are afraid they might not do well at sports they haven't tried	.14	.06	.09	.74*	.14
21. Some kids feel that they are better than others their age at sports BUT other kids don't feel they can play as well	.05	.02	.00	.76*	.07
27. In games and sports some kids usually watch instead of play BUT other kids usually play rather than watch	.13	.20	-.01	.50*	.39
33. Some kids don't do well at new outdoor games BUT other kids are good at new games right away	.08	.31	.00	.61*	.19
Physical appearance (Cronbach's α =.84)					
4. Some kids are happy with the way they look BUT other kids are not happy with the way they look	.69*	.11	.16	.19	.08
10. Some kids are happy with their height and weight BUT other kids wish their height or weight were different	.63*	.05	.01	.10	.08
16. Some kids wish their body was different BUT other kids like their body the way it is	.74*	.14	.02	.05	.10
22. Some kids wish their physical appearance (how they look) was different BUT other kids like their physical appearance the way it is	.83*	.11	.09	.06	.10
28. Some kids wish something about their face or hair looked different BUT other kids like their face and hair the way it is	.70*	.24	.19	.02	.06
34. Some kids think that they are good looking BUT other kids think that they are not very good looking	.67*	.12	.24	.20	.04
Behavioral conduct (Cronbach's α =.78)					
5. Some kids often do not like the way they behave BUT other kids usually like the way they behave	.01	.02	.49*	.15	.10
11. Some kids usually do the right thing BUT other kids often don't do the right thing	.18	.18	.76*	.02	.03
17. Some kids usually act the way they know they are supposed to BUT other kids often don't act the way they are supposed to	.16	.06	.77*	.03	.00
23. Some kids usually get in trouble because of things they do BUT other kids usually don't do things that get them in trouble	.01	.29	.57*	-.02	.08
29. Some kids do things they know they shouldn't do BUT other kids hardly ever do things they know they shouldn't do	.17	.23	.56*	-.02	.01
35. Some kids behave themselves very well BUT other kids often find it hard to behave themselves	.10	.22	.78*	-.02	.07

n=432 * salient (> .40).

Reliability

The internal consistency of all SPPC subscales was good. Cronbach's α coefficients for domain-specific evaluations ranged between .70 for Social Acceptance and .84 for Physical Appearance. Cronbach's α for Global Self-Worth was .76. The test-retest study was

conducted after one month in a group of 60 children (31 boys and 29 girls). The obtained correlations were high for all the domain-specific subscales. Pearson's r coefficients ranged between .64 and .82 (Table 5). The correlation with the retest score for Global Self-Worth was moderate (r=.50). These results suggest that self-perception in domain-specific areas is more stable in time than global self-esteem, which may still shift to a certain extent in a relatively short period of time.

Intercorrelations

All correlations between SPPC subscales were significant (p<.001), but Pearson's r coefficients were mostly low or moderate (Table 2). The only case in which r exceeded .50 was the correlation between the Global Self-Worth and Physical Appearance. The only r value below .20 was observed between Behavioral Conduct and Athletic Competence. The pattern of correlations confirms the assumption that SPPC subscales measure different aspects of one theoretical construct.

Table 2. Intercorrelations for the subscales in the Polish version of SPPC.

	Social Acceptance	Athletic Competence	Physical Appearance	Behavioral Conduct	Global Self-worth
Scholastic Competence	.27*	.31*	.41*	.48*	.50*
Social Acceptance		.45*	.26*	.20*	.42*
Athletic Competence			.33*	.16*	.36*
Physical Appearance				.35*	.63*
Behavioral Conduct					.46*

n=432 *p<.001.

Sex differences

In Table 3 we included the means and standard deviations for the six subscales. Due to the fact that self-perception develops within the context of cultural expectations which differ for boys and girls, we tested the sample for gender differences. We discovered that boys evaluated themselves significantly higher in two subscales: Physical Appearance (t=2.46, p=.01) and Global Self-Worth (t=2.17, p=.03), whereas girls obtained significantly higher scores in the Behavioral Conduct subscale (t=-3.55, p<.01). These results show that boys perceive themselves as being more content with their looks and generally happier with the way they are than girls. On the other hand, girls see themselves as better behaved than boys. We did not observe any difference between means in Athletic Competence, something which was systematically obtained in American research (Harter, 1985) and research conducted in other European countries (e.g. van der Bergh, Marcoen, 1999; Hoare et al., 1993).

Table 3. Means, standard deviations, and sex differences for the SPPC subscales in the Polish version.

			Boys n=206		Girls n=226				Levene test	
	M	SD	M	SD	M	SD	t	p	F	p
Scholastic Competence	2.90	.65	2.92	.63	2.88	.67	.63	.52	.37	.54
Social Acceptance	3.25	.71	3.28	.75	3.22	.67	.80	.42	.00	.93
Athletic Competence	2.98	.71	3.04	.69	2.92	.73	1.74	.08	.32	.57
Physical Appearance*	3.05	.74	3.14	.68	2.97	.78	2.46	.01	7.15	<.01
Behavioral Conduct	3.03	.62	2.92	.65	3.13	.57	-3.55	<.01	3.84	.05
Global Self-worth*	3.32	.57	3.38	.50	3.27	.62	2.17	.03	10.55	<.01

* - the difference was tested with the assumption of an inequality of variance as indicated by the Levene test.

Age differences

To study age differences we divided the sample into two subgroups. In the first subgroup we included children in the second and third grade, whereas the other subgroup comprised pupils from fourth to sixth grade. Obtained means, as presented in Table 4, were higher for all subscales in the group of younger children. Significant differences were observed for three subscales: Scholastic Competence (t=-2.00, p=.04), Physical Appearance (t=-5.19, p<.01), and Global Self-Worth (t=-3.64, p<.01). These results show that children tend to become more critical in their self-evaluations as they grow older. The decrease in self-concept affects mostly cognitive abilities perceived in the school context, and one's physical features. General acceptance of oneself as a person also declines.

Table 4. Age differences in self-evaluations for the SPPC subscales in the Polish version.

	Middle childhood (8-9-year-olds) n=127		Late childhood/ early adolescence (10-13-year-olds) n=305				Levene test	
	M	SD	M	SD	t	p	F	p
Scholastic Competence	2.99	.65	2.86	.65	-2.00	.04	.01	.92
Social Acceptance	3.31	.83	3.23	.66	-1.06	.28	1.28	.25
Athletic Competence	3.05	.67	2.94	.73	-1.40	.16	1.66	.19
Physical Appearance	3.33	.69	2.97	.73	-5.19	<.01	.58	.44
Behavioral Conduct	3.11	.62	3.00	.61	-1.70	.09	.21	.64
Global Self-worth	3.48	.51	3.26	.58	-3.64	<.01	3.73	.05

Validity

As indicators of SPPC validity we used TRS, and the average school grade in the previous semester (Table 5). SPPC correlations with teacher's ratings were moderate in four out of the five domain-specific subscales. The highest correlation was observed in scholastic competence (r=.47, p<.001). This result was expected since form teachers perceive

children firstly according to their school performance. We did not observe a significant correlation when we evaluated physical appearance. This may be due to the fact that children's subjective evaluations in this aspect are connected rather to the judgments of parents or other children and not teachers who usually do not make comments on a child's physical appearance.

Children's average school grades in the previous semester correlated strongly with the results in the Scholastic Competence subscale (r=.58, p<.001). The second highest correlation was obtained for Behavioral Conduct (r=.37, p<.001). These results suggest that the children's grades in elementary school are connected both to their perceived academic skills and to their perceived behavior. The connection to behavior may suggest that children who get good grades often feel that they act in the right way, the way that is expected by adults.

Table 5. Correlations of SPPC subscales with retest results, teacher's ratings, and school grades.

	Test-retest n=60	Teacher rating's n=215	Average school grade in the previous semester n=178
Scholastic Competence	.70**	.47**	.58**
Social Acceptance	.82**	.32**	.17*
Athletic Competence	.67**	.45**	.09
Physical Appearance	.80**	.13	.25*
Behavioral Conduct	.64**	.31**	.37**
Global Self-worth	.50**	----	.21*

*p< .05 **p<.001.

Predictors of global self-worth

We used regression analysis to state which domain-specific judgments influence children's global self-worth. The model presented in Table 6 had an F(5,426) of 103.35 (p<.001). R value was .74 and the adjusted R^2=.54. Results in the physical appearance subscale were the strongest predictor of global self-worth (Beta=.43, t=11.66, p<.001). Similar results were observed in other studies (e.g. Boivin et al, 1992; Harter, 2000). The influence of other subscales was significant but not as crucial with the exception of Athletic Competence which proved to be non-significant in the constructed model. These results show that the perception of one's physical appearance is the most important domain-specific evaluation influencing global self-esteem. When children are happy with the way they look it strongly predicts the way they evaluate themselves as a person and if they are happy with their lives.

Table 6. Regression data for the regression of global self-worth on to the domain-specific self-evaluations.

	B	Standard error of B	Beta	t	p
Constant	.74	.12		6.02	<.001
Scholastic Competence	.14	.03	.16	4.02	<.001
Social Acceptance	.17	.03	.21	5.73	<.001
Athletic Competence	.02	.03	.03	.90	.36
Physical Appearance	.33	.02	.43	11.66	<.001
Behavioral Conduct	.16	.03	.18	4.76	<.001

Discussion

In our study we tested the psychometric properties of SPPC in a sample of Polish children. The results of exploratory factor analysis indicated that the tested children clearly distinguished between the five domain-specific subscales included in the instrument. Thus, we confirmed that the factorial structure of the Polish version is similar to the one in the original instrument (Harter, 1985). The reliability of the Polish version of SPPC was high both in terms of internal consistency, with the α-Cronbach's coefficients ranging from .70 to .84, and in the correlated test-retest results (r>.60) for all domain-specific subscales. The lowest correlation in the retest study conducted after a month was observed in the Global Self-Worth subscale which suggests that the estimation of global self-esteem may be less stable in time than the evaluation in domain-specific areas.

Scores in all the SPPC subscales were significantly intercorrelated. The highest correlation was observed between Physical Appearance and Global Self-Worth, which suggests that the perceived physical features are closely connected to the general evaluation of oneself as a person. A similar result was obtained by Harter (1985) in the original study, and by other authors (Boivin et al., 1992; van Dongen-Melman et al., 1993). The high correlation between physical appearance and global self-worth may be explained by their similar contents – both refer rather to the sense of satisfaction than to the degree of competence as is the case with the other subscales (see van der Bergh, Marcoen, 1999).

The sex differences in our study showed that boy's global self-worth was higher that the girl's. Also, boys had higher self-concepts in physical appearance, but lower in behavioral conduct. A similar tendency for boys to rate themselves higher than girls was observed in most studies in Europe and America (e.g. Harter, 1985; van Dongen-Melman et al., 1993; Hoare et al., 1993). Differences in the perception of physical appearance between boys and girls may be explained by the higher standards set for girls in this aspect in society. Such standards may lead to a situation whereby girls see themselves in a more critical way and tend to be more unhappy with the way they look. Girls' higher

results in the domain of behavioral conduct may be explained by the fact that girls are usually perceived by significant others as calmer and better behaved than boys.

The results obtained by younger and older students confirm that children tend to become more critical in their self-evaluations over the course of development. A similar tendency was found in other studies (e.g. Harter, 1985; Hoare et al., 1993; van der Bergh, Marcoen, 1999). We observed that eight to- nine year-olds evaluated themselves higher than 10-13 year-olds in the domains of physical appearance, scholastic competence, and global self-worth. Especially the difference in evaluating physical features seems to show that younger children are much more content with their bodies and the way they look. Only at the turn of late childhood and early adolescence when children confront their self-concept with social standards in order to achieve gender identity does the growing dissatisfaction with physicality occur (Oleszkowicz, Senejko, 2011).

Instrument validity was tested by correlating the SPPC results with the TRS results, and school grades. Teacher's ratings were related to children's evaluations in all domains except physical appearance. This result shows that teacher and student judgments are fairly concordant. Differences in evaluating physical appearance may be due to the fact that usually teachers do not comment on children's looks. This may suggest that children's self-perceptions are connected rather to the judgments of parents and peers. Similar findings regarding a lack of correspondence between student and teacher physical appearance ratings were reported also in other studies (Boivin et al., 1992; van der Bergh, Marcoen, 1999). School grades correlated strongly with the children's perception of scholastic competence and behavioral conduct. This result confirms the tendency observed in educational research that a child's academic self-concept level is related to school achievement (Baumeister et al., 2003). The connection to the behavioral conduct domain suggests that children who get good grades in elementary school feel that their behavior is proper and that they act in the way that is expected by adults.

Also, in our study we showed that the perceived physical appearance has the most influence on global self-worth (Beta=.43 , $p<.001$). Such a finding may be explained by the emphasis placed on appearance within contemporary culture. Physical features are usually presented in the media as significant in a broad range of situations which suggests that they are more important than other self-aspects. Similar results regarding the importance of physical appearance were observed in other studies (Boivin et al., 1992; van der Bergh, Marcoen, 1999). The second best global self-worth predictor was the result in the Social Acceptance subscale (Beta=.21 , $p<.001$) which confirms that children feel it is important to be popular and liked by peers. Also, global self-worth was influenced significantly by the results in the Behavioral Conduct (Beta=.18 , $p<.001$), and the Scholastic Competence (Beta=.16 , $p<.001$) subscales. Except for Physical Appearance, the Beta-weights for all other subscales were similar.

In conclusion, our study confirmed that the Polish version of SPPC is a reliable and valid measure to assess children's self-concept. We can recommend this instrument for use both in individual diagnosis as equally in academic research.

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The Sexual Satisfaction Questionnaire – psychometric properties

Abstract:

The Sexual Satisfaction Questionnaire was designed to measure sexual satisfaction. It consists of 10 items. The results of several studies have supported the Questionnaire as psychometrically sound and valid. It may be a valuable tool for measuring one's attitude (both cognitively and emotionally) to their own sexual activity.

Keywords:

sexual satisfaction, sexual quality of life, The Sexual Satisfaction Questionnaire

Streszczenie:

Kwestionariusz Satysfakcji Seksualnej został stworzony do pomiaru poziomu satysfakcji seksualnej. Składa się on z dziesięciu itemów. Wyniki badań potwierdzają trafność i rzetelność metody. Kwestionariusz może być wartościowym narzędziem, służącym do pomiaru ustosunkowania podmiotu (poznawczo- emocjonalnego) do własnej aktywności seksualnej.

Słowa kluczowe:

satysfakcja seksualna, jakość życia seksualnego, Kwestionariusz Satysfakcji Seksualnej

Introduction

Studies on sexual life quality are dominated by the pathogenic paradigm (Rosen, Bachmann, 2008). In this approach, sexual satisfaction is usually defined negatively as a lack of dissatisfaction (Renaud, Beyer, Lord, for: Young et al., 2000). Similarly, in the pathogenic paradigm, one's health is understood as having no disorders or diseases. The studies conducted in this field focus mostly on the predisposition to sexual dysfunctions and

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their implications for health and happiness. Arrington, Cofrancesco and Wu (2004) analyzed questionnaires measuring sexual satisfaction and the quality of sexual life. The scholars found and evaluated 62 questionnaires published in English in 1957-2001. Only nine of them were assessed as being accurate and reliable. The methods concerning an interviewee's sexual satisfaction were to examine only its physiological nature , such as erections, duration, and orgasms, as well as pain and discomfort. Most methods employed to measure satisfaction have implied that different groups of people tend to evaluate their sexual life similarly. According to this concept, one can determine a standard configuration which will ensure sexual satisfaction. However, a few studies have indicated that one's sexual life may be rated as satisfactory despite some physiological dysfunctions. On the other hand, one can observe a paradox; despite having sexual health, the area is evaluated as unsatisfactory (Dundon, Rellini, 2010). Satisfaction with physiological performance does not always equate with the sexual satisfaction. In Ferrenidou's research (2008), 80 percent of women declared to be satisfied with sex, although 70 percent of them named at least one sexual problem. Nevertheless, half the women satisfied with their physiological performance during intercourse have not experienced sexual satisfaction. Hence, sexual satisfaction, though not the opposite to a disorder, t can constitute a separate dimension. Stephenson's and Meston's studies (2010) have demonstrated that among a given clinical group, orgasm was not associated with satisfaction. It was, instead, conditioned by general arousal and lubrication. Importantly, correlating satisfaction with orgasm – often considered as an indicator – was not statistically significant. The above confirms the hypothesis that sexual satisfaction is highly personal, and is difficult to measure with indicators chosen arbitrarily. Basson (2000) emphasizes that the focus on physical responses coming from the genitals – considered as the traditional indicators of arousal and satisfaction – ignores the basic components of women's satisfaction with their sexual life: intimacy, trust, and pleasure.

According to the latest holistic definition, the sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality. This is not just an absence of disease, disorder or disability, but requires a positive and respectful approach to sexuality and sexual partnerships, as well as having pleasurable and safe experiences free of coercion, discrimination and violence (WHO, 2010). Furthermore, salutogenesis is important in the holistic approach, where central importance is given not to the disturbance and pathogens but to health and its determinants (Dolińska-Zygmunt, 2001). Current literature accentuates the need to complement existing research with a salutogenetic paradigm. To achieve this, one has to create methods measuring sexual satisfaction in which the operational variable will be holistically compatible to sexual health (Ferenidou, 2008; Rosen, Bachmann, 2008; Stephenson, Meston, 2011). According to this view, we have attempted to create a tool measuring one's own sexual satisfaction understood as a comment (cognitive-emotional) on their own sexual activity.

Stages in constructing the Sexual Satisfaction Questionnaire and its psychometric characteristics

The work on the Questionnaire was started in 2010. Based on the literature in this area, we created a pot of 35 questions in Polish which could become a part of a questionnaire. Fifth-year psychology students and a certified psychologist constituted the competent judges. They chose 28 items and decided to include them in a pilot version. Forty-two respondents (20 women and 22 men) aged 20-32 years participated. The results have been presented through statistical analysis, and are based on the Polish version of the questionnaire.

Discriminative power of questions

Questions with less discriminatory power than 4.0 were omitted and removed from the questionnaire. We also decided to reduce the proportion of those questions among which there was a significant two-way correlation, assuming that they may be too similar to each other and carry the same content (Table 1). Finally, the method contained 10 positions. An interviewee responds to them with a four-point Likert scale. The result informs about the level of sexual satisfaction. The higher the result, the higher the satisfaction.

Table 1. Discriminatory power of questions.

The content of the item in Polish	The content of the item in English	Pearson's correlation	Validity (two-sided)
1. Niepokoi mnie jakiś element mojego życia seksualnego.	1. I am disconcerted with a part of my sexual life	0.675	0.001
2. Seks jest dla mnie źródłem przyjemności.	2. Sex is a source of pleasure for me	0.449	0.001
3. Myślenie o seksie wywołuje we mnie negatywne emocje.	3. Thinking about sex generates negative emotions	0.589	0.001
4. Czuję się atrakcyjny/ atrakcyjna seksualnie.	4. I feel sexually attractive	0.583	0.001
5. Myślę o sobie jako o kiepskim partnerze seksualnym.	5. I find myself a poor sexual partner	0.692	0.001
6. Nie mam problemów w życiu intymnym.	6. I do not have any problems in my sexual life	0.654	0.001
7. Lubię myśleć o moim życiu seksualnym.	7. I like thinking about my sexual life	0.715	0.001
8. Moje życie seksualne mnie frustruje.	8. My sexual life frustrates me	0.603	0.001
9. Obawiam się, że nie zadowalam mojego partnera/ partnerki seksualnej.	9. I am afraid I do not satisfy my sexual partner	0.649	0.001
10. Uważam moje życie seksualne za udane.	10. I find my sexual life fulfilling	0.637	0.001

The above values refer to Polish items. Source: own work.
**. Correlation is significant on level 0.001 (duplex).
*. Correlation is significant on level 0.05 (duplex).

Confirmatory factor analysis

As expected, confirmatory factor analysis, -- used to confirm the expected number of factors -- showed as one. To evaluate the match of the model we employed an RMSE ratio, which amounted to 0.073 (Table 2). Values less than 0.05 indicated a very good adaptation, less than 0.08 satisfactory, and higher than 0.1 no match.

Table 2. Confirmatory factor analysis.

RMSEA	LO 90	HI 90	PCLOSE
0.073	0.001	0.133	0.289

Source: own work.

Reliability

The method's reliability measured by the Cronbach Alpha indicated a high consistency: 0.83. It can be interpreted as the percentage [of results variance attributed to the real results].

Further work on this method was employed among young, middle-aged and late adults. The study was conducted in Poland in 2012 on a group of 90 women and 77 men, aged 21-72, who lived in heterosexual relationships. The declared duration varied from six months to 42 years. Average results of sexual satisfaction are presented in Table 3. Reliability measured by the Cronbach Alpha again indicated a high consistency: 0.89 in the 21-35 age group, 0.89 in the 36-50 age group, and 0.76 in the 51-72 age group.

Table 3. Descriptive statistics of sexual satisfaction measured by the Sexual Satisfaction Questionnaire.

		Age			Length of relationship in years			Formalization of the relationship	
		20-35	36-50	50-72	1-4	5-20	20+	Married	Unmarried
Women	N	30	29	31	32	28	30	51	39
	Minimum	12	15	22	12	15	22	12	13
	Maximum	40	40	38	40	40	39	40	40
	Average	32.97	31.38	30.65	32.97	30.75	31.1	30.63	33
	Standard deviation	6.81	6.42	4.23	6.68	6.08	4.74	6.09	5.49
Men	N	30	25	22	28	25	24	39	38
	Minimum	25	24	21	25	24	21	21	25
	Maximum	40	40	39	40	40	40	40	40
	Average	33.67	33.64	31.45	33.21	33.56	32.25	32.36	33.71
	Standard deviation	4.55	4.97	4.79	4.43	5.14	4.95	4.84	4.72

Source: own work.

Theoretical accuracy

Sexual satisfaction and quality of life

On the basis of the literature review it has been assumed that sexual satisfaction is related to life quality (Rosen, Bachmann, 2008; Ventegodt, 1998, Arrington et al, 2004). In studies supporting this assumption researchers examined 100 people (49 women and 51 men) aged 23 to 35. In order to measure the variables we used Straś-Romanowska, Oleszkowicz and Frąckowiak's Life Quality Questionnaire (Stras-Romanowska, 2005) and our own Questionnaire of Sexual Satisfaction. The Life Quality Questionnaire was developed in 2004 and was based on a trait-existential theory. The welfare's examined dimensions are in the following spheres:

- psychophysical
- psychosocial
- subject
- metaphysical

The above dimensions form four scales, each including 15 statements, and the whole questionnaire consists of 60 items. Every examined person has to respond to a statement selecting one answer from a four-response scale (1 - strongly disagree, 2 - rather disagree, 3 - rather agree, 4 - strongly agree). Counting up the scores from all spheres provides one with a global sense of life quality, which can be described as low, medium or high.

Reliability for the Psychophysical Sphere is 0.77, Psychosocial 0.71, Subject 0.72, and Metaphysical 0.65. Cronbach's Alpha for the test is 0.7.

According to the correlation coefficient (Pearsnon's r), sexual satisfaction and life quality are statistically significant (Table 4). For women, sexual satisfaction is significantly related to both the global score and all life spheres. The analysis among men demonstrates the relationship only between sexual satisfaction and the global result along with the psychophysical sphere. Correlation between sexual satisfaction and sense of life and other spheres is stronger for women, which is consistent with the statistics presented in the literature (Table 5).

Table 4. Pearson correlation between sexual satisfaction and sense of quality of life and its dimensions.

Psychophysical sphere	0.533(**)
Psychosocial sphere	0.243(*)
Subjective sphere	0.310(**)
Metaphysical sphere	0.262(**)
Global sense of quality of life result	0.453(**)

**. Correlation is significant on level 0.001 (duplex).
*. Correlation is significant on level 0.05 (duplex).
Source: own work.

Table 5. Pearson's correlation between sexual satisfaction and sense of quality of life and its spheres for men and women.

Women	Psychophysical sphere	0.588(**)
	Psychosocial sphere	0.456(**)
	Subjective sphere	0.365(**)
	Metaphysical sphere	0.378(**)
	Global result of sense of quality of life	0.567(**)
Men	Psychophysical sphere	0.477(**)
	Psychosocial sphere	0.005
	Subjective sphere	0.239
	Metaphysical sphere	0.113
	Global result of sense of quality of life	0.304(*)

**. Correlation is significant on level 0.001 (duplex).
*. Correlation is significant on level 0.05 (duplex).
Source: own work.

Sexual satisfaction and self-esteem

Numerous studies illustrate the connection between self-esteem and satisfaction with sexual life (Bancroft, 2009, Baumeister et al. 2003, Narvaez et al., 2006). Our studies aim at verifying this assumption. Participants included 100 people (49 women and 51 men) aged 23-35 years. The level of self-esteem was measured by M. Rosenberg's Self-Esteem Scale (SES) in the Polish adaptation by Dzwonkowska, Lachowicz-Tabaczek and Łaguna (2008). According to Rosenberg (1965, for: Dzwonkowska et al., 2008), self-esteem is a conscious self-assessed attitude. It is a subjective, global construct; for adults it is relatively permanent and trait-like.

Rosenberg's Self-Assessment Scale consists of 10 statements. Respondents mark in a four-point Likert scale the extent to which they agree to a statement. The result is assigned to one out of five following categories: very low self-esteem, low self-esteem, average self-esteem, high self-esteem, very high self-esteem. Cronbach's alpha in the Polish adaptation is 0.83.

Our study confirms the correlation obtained by the Self-Esteem Scale (SES) and the Sexual Satisfaction Questionnaire. The value of the correlation coefficient was 0.44 at $p < 0.001$. The comparison between male and female scores identifies no disparity in these variables' strengths.

Sexual satisfaction measured by our method and the Inventory of Sexual Satisfaction

In order to further confirm the theoretical validity, we measured the correlation coefficient between the respondents' results who were examined by our Questionnaire and by W. Hudson's Inventory of Sexual Satisfaction (Davies, 1998). The ISS translation into

Polish was made by Postek and Stolarski. ISS is a 25-item method measuring the dissatisfaction level in the sexual component. Respondents provided their attitude towards given ascertainments according to the seven-point Likert scale. The higher the score, the greater the dissatisfaction with sexual life. Cronbach's alpha for the original version is 0.92, and 0.93 for the one translated into Polish. Respondents included 60 people (29 women and 31 men) aged 19-35. The results confirmed the negative relationship between the variables. The correlation coefficient (Pearson's r) value between sexual satisfaction measured in the Questionnaire of Sexual Satisfaction and dissatisfaction measured by ISS is -0.74 at $p < 0.05$. The strength of the relationship between the variables for women ($r = -0.54$, $P < 0.05$) is lower than for men ($r = -0.82$, $P < 0.05$). Based on the reviewed literature, it can be concluded that women's satisfaction with sexual life is conditioned by many factors beyond the sexual (Basson, 2005). Satisfaction arising from other life areas may increase sexual satisfaction. Still, for men, the relationship between perceived sexual discomfort and its satisfaction is stronger.

Conclusion

For most people sex is highly significant and provides many benefits. Satisfaction with the sexual life is to maintain satisfaction within a relationship and to provide considerable emotional, psychological and physical pleasure. Having concerns for increasing interest in this satisfaction and bearing a direct relation with one's health and happiness, the Questionnaire of Sexual Satisfaction may represent a useful tool to measure this variable among people in young, middle and late adulthood.

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