

ANNA SUCHAŃSKA  
Adam Mickiewicz University, Poznan  
Institute of Psychology  
AGNIESZKA WORACH

## SELF-COMPLEXITY AND THE SENSE OF IDENTITY

The article presents an attempt at an empirical analysis of the relation between self-concept differentiation and the sense of identity. Patricia Linville's concept of self-complexity and a multidimensional approach to the sense of identity have been used. The hypothesized relations of these structural characteristics of personality with self-esteem have been analyzed as well. Research results indicate no connections of self-complexity with the sense of consistency, stability, separateness, accessibility of identity content, or self-esteem. However, cluster analysis revealed the presence of three groups with characteristic combinations of identity and self-complexity dimensions as well as different self-esteem levels. The psychological significance of these differences is discussed.

**Keywords:** self-complexity, self-concept differentiation, self-concept consistency, sense of identity, self-esteem.

## SELF-COMPLEXITY AND THE SENSE OF IDENTITY

Contemporary theories present the self as a heterogeneous structure, composed of a number of schemata activated to different degrees depending on the situational context or role (e.g., Hermans, 1996; James, 1890; Markus, 1977; Roberts, 2007; Stryker, 2007). Self-complexity is understood and studied in many ways in personality psychology (for a review, see Rafaeli-Mor & Steinberg, 2002). In the approach proposed by Linville (1985, 1987), it is the number and diversity of self-images generated by a study participant. The more numerous

and the less alike they are, the more complex the self-concept is. Self-complexity is a structural characteristic, classified – together with compartmentalization – among the measures of self-concept differentiation (pluralism), whereas self-concept consistency, self-concept clarity, and self-discrepancies are recognized as measures of integration (unity) (Campbell, Assanand, & Di Paula, 2004). The manner of operationalization as well as the indicators of self-complexity and self-concept differentiation do not allow for these measures to be regarded as simple opposites, which their theoretical significance might suggest they are. Still, both measures contain information on the content similarity of the generated self-characterizations. The value of Linville's approach, as against consistency measures, lies in the freedom of choosing any number of versions of the self and in the inclusion of this aspect in the description of self-concept structure (Koch & Shepperd, 2004). Moreover, Linville's self-complexity index correlates with another measure of self-complexity (*Hierarchical Attribute Class Number*) (Luo & Watkins, 2008).

In the literature on the subject, the existence of links is suggested between the similarity (lack of differentiation) of the content of context-dependent versions of the self and the consistency of identity (Block, 1961; Campbell et al., 2004; Donahue et al., 1993; Stryker, 2007; Styła, Jankowski, & Suszek, 2010). For example, Styła and colleagues (2010) write: "Theoretically, then, it should be concluded that the smaller the inconsistency between the roles, the more stable and internally consistent the general identity should be" (p. 36, translation ours). When considering the validity of this thesis, it is necessary to specify that self-concept comprises numerous self-characterizations, more or less relevant from the point of view of self-identification. As regards personal identity, its content is mainly those key attributes (traits, values, ideas, or beliefs) of an individual that the individual abstracts (through complex integrating processes such as assimilation or accommodation) as having particular cognitive and emotional importance to self-definition and as those whose loss entails a sense of no longer being the same person. It is them that, due to their emotional importance, distinctiveness, global character, and considerable stability, may be a factor in the formation of a sense of relative stability, consistency, and accessibility of identity content, which constitutes a subjective manifestation of identity (Erikson, 2004; Jarymowicz, 1989; Mandrosz-Wróblewska, 1988; Stryker, 2007; Oleś, 2008). If the content recurring in the self-subconcepts distinguished by individuals were the prototypical, key content, then the position cited above, suggesting the existence of connections between identity and the consistency of self-image content could turn out to be valid. However, it cannot be excluded that a many-sided, complex

(differentiated) self-concept may be accompanied by a sense of integrated personal identity as well. As Batory (2008) rightly notes, "Self-knowledge can be heterogeneous and inconsistent ... but this concerns the central dimensions of the self to a smaller degree" (p. 283, translation ours), the central dimensions being constitutive of identity. Similar conclusions indirectly follow from the debate on the necessity to distinguish between the content similarity of various self-subconcepts and the integration of personality (Lutz & Ross, 2003; Sheldon & Emmons, 1995; Suszek, 2007).

Theoretical reflection on the relation between self-concept and variously defined identity is fairly often undertaken, also in the Polish literature on the subject (e.g., Jarymowicz, 2000; Batory, 2008; Oleś, 2008). Empirical data concerning this important area of personality psychology are much harder to find. A majority of empirical studies on human identity focus on the concept of identity statuses (e.g., Cramer, 2001; Kroger, 2003; Marcia, 1966) as well as the concept of identity processes (Berzonsky, 2003; Sneed & Whitbourne, 2003) or narrative identity (McAdams, 1996). There have been much fewer attempts to describe identity experiences, presenting the integration of self-concept's key content from a phenomenological perspective, in the form of so-called identity-related senses: the senses of consistency, continuity, belonging, separateness, and accessibility of identity content (Brygoła, 2012; Erikson, 2004; Jarymowicz, 1989; Majczyna, 1999; Mandrosz-Wróblewska, 1988; Oleś, 2008; Pilarska, 2012; Schachter, 2002; Sokolik, 1996).

Analyzing the relations between self-complexity and a number of identity-related senses was the main aim of the research presented in this text. We decided to present the significance of both these categories and their interrelations to human functioning by showing their relations with broadly understood self-esteem, making it part of the debate on the still open question of the adjustment value of self-complexity. Verifying the hypotheses of her approach, Linville demonstrated that, in situations of failure or another threat to some self-aspect, self-complexity prevents negative affect from spreading to other self-aspects and thus protects global self-esteem (Linville, 1987; Smith & Cohen, 1993). However, subsequent studies yielded contradictory results (Campbell, Chew, & Scratchley 1991; Constantino, Wilson, Horowitz, & Pinel, 2006; Jordan & Cole, 1996). Authors point to methodological factors that relativize conclusions concerning the adjustment value of self-complexity (Woolfolk, Novalany, Gara, Allen, & Polino, 1995) or even argue that its connections with adjustment and self-esteem are irrelevant (Campbell et al., 2004; Morgan & Janoff-Bulman, 1994; Schleicher & McConnel, 2005; Rafaeli-Mor & Steinberg, 2002). The met-

hod of investigating self-esteem may also make a difference. Global self-esteem indices were usually used, whereas Linville's (1987) model of self-complexity allows for different evaluation of different self-aspects.

Summing up the reflection on interrelations between self-complexity and the sense of personal identity, we follow Linville (1987) in understanding self-complexity as the number and differentiation of context-dependent self-characterizations (i.e., ones associated with different roles or relations). Their content may be more or less homogeneous. They may either remain separate areas of self-knowledge or be subject to complex integrating processes, which make it possible, despite the multiplicity of self-images, to achieve a sense of relative continuity and unity of the self.

#### Research Problems and Hypotheses

The main research problem of this study concerns the following question: are self-complexity and the sense of identity separate theoretical categories describing different aspects of self-knowledge and self-experience – or are they inter-related, with the level of self-complexity (self-concept differentiation) having significance to the level of identity-related senses such as the sense of consistency and stability of the self? Following the suggestions provided in the literature on the subject concerning the relations between self-concept differentiation and identity (e.g., Donahue et al., 1993; Stryker, 2007; Styła et al., 2010), we assume that, in the course of complex abstraction and generalization processes activated for the purpose of integrating (unifying) various self-images, these attributes acquire a general, transsituational dimension, which may foster their greater stability and thus contribute to building the subjective aspect of identity in the form of a sense of relative consistency, stability, separateness, and specificity of the self. Consequently, self-complexity (self-concept differentiation) can be expected to be inversely proportional to the sense of consistency, stability, separateness, and accessibility of identity content.

On the other hand, existing empirical data (Campbell et al., 2004; Suchańska & Ligocka, 2011) as well as the theoretical distinction between the unification of different versions of the self and identity formation processes or between principles governing the objective and the subjective approaches to identity suggest that self-complexity and the experience of internal consistency, stability, or separateness are different aspects of psychological reality (e.g., Batory, 2008; Campbell et al., 2004; Sheldon & Emmons, 1995).

If it turns out that no simple relations exist between the analyzed areas of self-description and self-experience, the remaining task will be to check if there may be other, nonlinear, tendencies describing specific interrelations between self-complexity and measures of the sense of identity. Hence the next question, an open-ended one this time: can there be different variants of co-occurrence (combination) of self-complexity with dimensions of the sense of identity, and are the possible types of such configurations connected with different self-evaluation and self-esteem in different spheres.

Finally, the complex character of self-concept provokes the question of what relations, if any, can be observed between the degree of its complexity and global self-esteem as well as specific self-esteem levels. In order to answer this question, it is necessary to refer to the position adopted by Linville (1985), who saw the adjustment value of this structural characteristic in the limitation of negative affect to the area affected by a situation threatening the self, preventing its spread to other self-aspects. It therefore appears reasonable to expect a positive relation between self-complexity and global self-esteem or its selected aspects.

## METHOD

### Participants

The sample was composed of 102 students (21% of them male) of liberal arts and social sciences, representing various higher education institutions of the Wielkopolska region. The mean age in the study group was  $M = 23.50$  years ( $SD = 3.22$ ). The study was conducted in groups; participation was voluntary and anonymous.

### Tools

**Self-complexity.** Barczak, Besta, and Bazińska's (2007) Polish version of *P. Linville's Self-Complexity Study Technique* was used to measure self-complexity. A participant's task is to name any number of roles that he or she performs in life and to assign adjectives to each of them, choosing from a list of 60 words (30 positive and 30 negative). The indicators of self-complexity are the number of self-aspects (generated roles) and their differentiation, calculated in the form of the  $H$ -statistic, being a measure of qualitative data dispersion. The  $H$ -statistic is measured using the following formula:

$$H = \log_2 n - \frac{\sum_i n_i \log_2 n_i}{n}$$

where:  $n$  – is the number of all the attributes available (i.e., the number of all the adjectives in the list, in this case  $n = 60$ );

$n_i$  – is the number of adjectives that occur in a given unique group combination.

A detailed discussion of the way of calculating the  $H$ -statistic is available in the study by Barczak and colleagues (2007). Because of the two-dimensionality of the  $H$ -statistic, emphasized in the literature, in the analysis of our results we also take into account the number of self-aspects, considered to be a “pure” measure of self-complexity (Brown & Rafaeli, 2007; Constantino et al., 2006).

**The sense of identity.** *The Multidimensional Identity Inventory* (WKT) developed by Pilarska (2012) was used to measure identity, understood as the set and dynamic organization of identity-related senses distinguished on the basis of the literature, concerning that personal content which an individuals regards as the most characteristic of him or her. The sense of identity is treated here as a subjective manifestation of identity content integration. The inventory comprises 50 test items making up six subscales describing the senses of: *accessibility* (of internal content), connected with the clarity and ease of retrieving content related to oneself; *specificity*, concerning the subjective experience of one’s own uniqueness and otherness; *separateness*, being a measure of distinguishing one’s own needs, beliefs, or emotions from other people’s experience; *consistency*, understood as the perceived internal concord and harmony; *stability*, meaning the experienced continuity in time; and *self-worth*, defined as the global emotional attitude to oneself.

Each item is rated on a four-point scale, from *definitely no/never* to *definitely yes/always*. Cronbach’s alpha reliability coefficients for subscales are satisfactory and range between  $\alpha = .79$  do  $\alpha = .86$ . The stability subscale is an exception, with the reliability coefficient of  $\alpha = .62$ .

**Self-esteem.** Fecenec’s (2008) Polish adaptation of O’Brien’s and Epstein’s *Multidimensional Self-Esteem Inventory* (MSEI) was used for self-esteem measurement. Self-esteem, an evaluative aspect of self-knowledge, is approached by Epstein (1973) as a complex, hierarchically organized system with different levels of generality. It may therefore be considered as a generalized attitude towards oneself or as evaluation of selected aspects of functioning. The inventory measures global self-esteem and its components such as: competence, lovability,

likability, personal power, self-control, moral self-approval, body appearance, body functioning, and defensive self-enhancement. The scale that Epstein and O'Brien considered to be a measure of "identity integration" describes the aspect of identity whose meaning refers to the sense of internal consistency and clarity. Further in the text, we retain the original name of that scale for the generalized experience of self-unity, bearing in mind that – as has been theoretically assumed – it is the different dimensions of the sense of identity that will constitute a subjective manifestation of identity content integration.

### Results

The fundamental question of this study concerned the interrelations between self-complexity and the sense of consistency, stability, accessibility, separateness, specificity, and worth of identity content. As the data in Table 1 show, self-complexity was significantly related to only two aspects of the sense of identity: the senses of specificity and self-worth. No significant correlations were found between self-complexity and the remaining dimensions of the sense of identity or between self-complexity and the sense of confidence and agreement with oneself – i.e., identity integration as understood by Epstein.

Table 1  
*Correlations Among Dimensions of the Sense of Identity, Self-Complexity, and Self-Esteem (N = 102)*

	MSA	BA	GSE	LO	DSE	LI	SC	PP	CO	BF	SSW	Self- -Com- plexity	<i>N</i> aspects
Integration	.645**	.367**	.565**	.454**	.418**	.318**	.435**	.433**	.453**	.289**	.485**	.178	.127
Consistency	.566**	.286**	.420**	.389**	.374**	.250*	.366**	.348**	.432**	.256*	.485**	.120	.077
Accessibility	.515**	.454**	.523**	.393**	.334**	.336**	.347**	.359**	.456**	.347**	.618**	.156	.090
Specificity	.039	.498**	.468**	.158	.052	.483**	.031	.445**	.406**	.353**	.520**	.220*	.077
Separateness	.342**	.333**	.327**	.205*	.406**	.237*	.247**	.323**	.387**	.247*	.479**	.090	.100
Stability	.339**	.402**	.398**	.332**	.266**	.287**	.149	.245*	.345**	.249*	.507**	.147	.192
Self-Com- plexity	.172	.138	.177	.179	.128	.175	.059	.077	.304**	.120	.244*	–	.646
<i>N</i> aspects	.184	.156	.155	.185	.106	.166	.167	.118	.136	.131	.100	.646**	–

*Note.* MSA – Moral Self-Approval, BA – Body Appearance, GSE – Global Self-Esteem, LO – Lovability, DSE – Defensive Self-Enhancement, LI – Likability, SC – Self-Control, PP – Personal Power, CO – Competence, BF – Body Functioning, SSW – Sense of Self-Worth

\*\*  $p < .01$  (two-tailed); \*  $p < .05$  (two-tailed)

The second question concerned the relation of self-complexity with general self-esteem as well as with its selected areas. Self-complexity correlates significantly with only one out of eleven areas of self-esteem: the assessment of one's own competence. In addition, the participants' subjective evaluation of the remaining areas of their functioning remains unrelated to how complex their self-concept is and how many versions of the self it consists of.

Given the systematic absence of significant correlations between self-complexity and most measures of the sense of identity or self-esteem, it is difficult to defend the hypothesis predicting the existence of such correlations. Still, explanation should be provided for the observed, though weak, correlations of self-complexity with the sense of specificity, the sense of self-worth, and the assessment of one's competence before we recognize them to be potential psychological benefits of having a complex self-concept. As additional regression analyses show, correlation between self-complexity and the sense of self-worth is only ostensible and reflects the relation between the sense of self-worth and the assessment of one's competence, which, unlike self-complexity, constitutes a significant determinant of the sense of self-worth. Let us note, incidentally, that the sense of consistency of one's identity is a significant covariate of Epstein's "identity integration" measure, which confirms the narrower meaning of this scale (corresponding, as a matter of fact, to the content of this item). The sense of consistency also correlates positively with global self-esteem and all of its other aspects (avg.  $r = .37$ ;  $p < .05$ ). The remaining measures of the sense of identity are significantly related to self-esteem as well. The sense of accessibility, specificity, separateness, and stability co-occurs both with the sense of self-worth ( $r = .53$ ;  $p < .001$ ) and with general self-esteem (avg.  $r = .43$ ;  $p \leq .001$ ). Because of the axiological components of personal identity, it is worth noting the particularly strong connections of self-concept consistency and Epstein's "identity integration" with moral self-approval (respectively:  $r = .57$  and  $r = .65$ ;  $p < .001$ ). Such considerable differences between the correlations of self-complexity and the sense of identity with self-esteem constitute yet another observation that argues for the psychological separateness of these two personality areas.

With reference to the last, fourth, research question, it was resolved to check if within the whole study group there are subgroups of individuals characterized and at the same time distinguished by a specific configuration of variables describing self-complexity and identity-related senses. *K*-means cluster analysis yielded three clusters. The grouping was based on the indices of self-complexity and identity variables (consistency, accessibility, specificity, stability, separateness, and "identity integration"). Significantly different means were obtained for

all the variables entered into the analysis. Detailed data are presented in Table 2<sup>1</sup>. Figure 1 is a graphic illustration of the clusters identified.

Table 2  
*Self-Complexity vs. Identity Variables in Three Clusters – ANOVA and Post-Hoc Test (Bonferroni's or Dunnett's)*

Variables	Cluster 1 (n = 27)		Cluster 2 (n = 22)		Cluster 3 (n = 53)		F	Post-hoc	$\eta^2$
	M	SD	M	SD	M	SD			
Self-Complexity	1.55	0.67	2.10	0.68	1.55	0.48	7.70***	2 > 1, 3	.14
N aspects	5.26	2.43	7.14	2.53	4.60	1,28	13.27***	2 > 1, 3	.21
Accessibility	8.78	1.45	13.41	1.44	12.00	1.51	67.21***	1 < 3 < 2	.58
Specificity	14.41	4.05	17.55	2.77	13.38	3.14	12.18***	2 > 1, 3	.20
Separateness	17.63	3.39	24.86	2.77	22.17	2.67	40.35***	1 < 3 < 2	.45
Consistency	18.48	2.67	28.77	3.18	25.57	2.94	84.20***	1 < 3 < 2	.63
Stability	9.22	1.58	14.27	1.72	12.23	2.08	45.39***	1 < 3 < 2	.48
Integration	26.22	4.16	35.86	5.19	32.57	4.39	30.20***	1 < 3 < 2	.38

Note. \*\*\*  $p \leq .001$

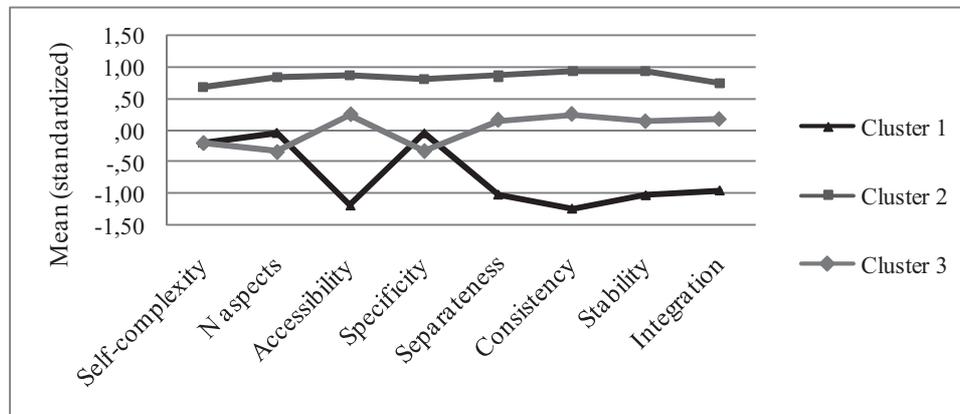


Figure 1. Graphic illustration of the clusters identified.

<sup>1</sup> The results of Levene's test indicate that the prediction concerning the homogeneity of variances is fulfilled only for the number of categories ( $F(2, 99) = 6.60; p < .01$ ). Dunnett's test was applied in post hoc analyses in this case, whereas in the remaining cases Bonferroni's multiple comparison test was used.

Cluster 1, comprising 27 individuals, is characterized by the co-occurrence of simple, weakly differentiated self-concept with a low level of identity content integration. Such a configuration reflects self-experience that is undifferentiated but at the same time dispersed, changeable, unclear as regards the content of self-knowledge, with a weakly developed sense of borders and contact with oneself, accompanied by a sense of one's own specificity (exceptionality or uniqueness). Despite small self-concept differentiation, these people feel uncertain about who they are, unstable, different, and confused. This type of structural organization is far from the expected relation between low self-complexity and an integrated sense of identity. It could be supposed that the weakly differentiated self-concept would not constitute a particular challenge for reflection on identity. It was proposed that such a schematic organization of personal content and self-experience, devoid of creative reflection, should bear the name of "the Syncretic Self" (cf. Obuchowski, 2000, p. 101)<sup>2</sup>.

Cluster 2 comprises 22 individuals with the highest self-complexity and the highest level of the sense of consistency, accessibility, specificity, stability, as well as separateness of identity content. The strong sense of identity and the self-concept more complex than in the other clusters give a picture of individuals with a differentiated, many-sided self-concept who at the same time maintain a strong sense of self-unity: of who they are and who they are not. They perceive the differences between their functioning in many roles and flexibly react to changes of context without losing a firm sense of self-continuity. It is even possible that, posing a kind of challenge for identity integration processes, a strongly differentiated self-concept provokes reflection directed towards working out a consistent and stable sense of identity. Such an organization of the content of self-concept and identity-related senses could be named "the Reflective Self."

Cluster 3, the largest one, comprises 53 individuals with average self-complexity, close to that in Cluster 1. It differs from Cluster 1 in having significantly higher levels of all dimensions of identity structure except specificity (though these levels are lower than those in Cluster 2). The level of identity integration manifests itself here in a relatively mature sense of consistency, stability, separateness, and accessibility of identity-related content combined with a weakened sense of one's own uniqueness. Thus, low self-complexity co-occurs here with a more reflectively processed identity than in Cluster 1 – more integrated, consistent, and stable but less individualized. With self-concept so structurally simplified, the achievement of a certain level of identity integration at the cost of

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<sup>2</sup> We wish to thank the reviewer for suggestions concerning the naming and interpretation of clusters.

giving up the sense of one's own uniqueness may be a sign of adjustment activity on the part of the subject – “the Adaptive Self.”

The final stage of analysis was supposed to answer the question about the level of self-esteem in individuals representing the above types of configuration of self-complexity and sense of identity measures. As the data presented in Table 3 show, the clusters identified differ significantly in specific self-esteem levels<sup>3</sup>.

Table 3  
*Self-Esteem in Three Clusters – ANOVA and Post-Hoc Test (Bonferroni's)*

Variables	Cluster 1 (n = 27)		Cluster 2 (n = 22)		Cluster 3 (n = 53)		F	Post-hoc	$\eta^2$
	M	SD	M	SD	M	SD			
MSA	31.85	6.11	42.05	4.72	38.49	5.04	24.54***	1 < 3 < 2	.33
BA	25.67	6.82	35.00	6.05	27.43	5.91	15.72***	2 > 3, 1	.24
GSE	25.15	6.09	34.91	5.59	29.53	5.01	19.54***	1 < 3 < 2	.28
LO	30.63	5.75	38.18	4.89	33.66	5.68	11.31***	2 > 3, 1	.19
DSE	40.33	8.87	52.59	7.59	47.83	7.43	15.53***	1 < 3, 2	.24
LI	29.59	6.63	36.68	3.82	31.42	4.96	11.92***	2 > 3, 1	.19
SC	28.44	5.63	35.91	4.09	31.06	4.60	14.99***	2 > 3, 1	.23
PP	29.04	6.16	34.68	5.07	31.60	4.54	7.37***	1 < 2	.13
CO	29.07	4.69	36.68	4.12	32.85	4.65	17.01***	1 < 3 < 2	.26
BF	28.93	6.85	37.23	6.84	30.89	6.40	10.46***	2 > 3, 1	.17
SSW	9.00	2.17	13.00	1.63	11.00	1.89	26.52***	1 < 3 < 2	.35

Note. MSA – Moral Self-Approval, BA – Body Appearance, GSE – Global Self-Esteem, LO – Lovability, DSE – Defensive Self-Enhancement, LI – Likability, SC – Self-Control, PP – Personal Power, CO – Competence, BF – Body Functioning, SSW – Sense of Self-Worth

\*\*\*  $p \leq .001$

Self-assessment was the highest in many respects in the case of people with the so-called “reflexive self” (Cluster 2). These are, as stated before, individuals with the highest self-complexity who at the same time experience themselves in a manner that ensures a high sense of consistency, stability, accessibility, specificity, and separateness of their own selves. An awareness of differences between the roles performed and an integrated sense of identity is combined in them with

<sup>3</sup> The results of Levene's test indicate that the prediction concerning the homogeneity of variances is fulfilled for all the variables ( $p > .05$ ). Bonferroni's multiple comparison test was applied in post hoc analyses.

the highest level of self-esteem – global as well as concerning all the specific areas. The other two profiles provide different observations. They describe individuals with similar levels of self-complexity but with different sense of identity levels. The multiple comparison procedure reveals that Clusters 1 and 3 differ significantly in global self-esteem and in the sense of self-worth, as well as in moral self-approval and competence self-assessment. Self-esteem in these areas is significantly lower in Cluster 1 individuals, whose average level of self-complexity co-occurs with the weakest sense of identity. Thus, with a simplified manner of self-description or perhaps even with a certain rigidity of behavior, they may be prone to a sense of failure, self-dissatisfaction, and internal as well as external conflicts. The Cluster 3 group is individuals functioning fairly well, resembling those from the previous group in having a rather simple self-concept. However, they have greater internal comfort thanks to a stronger sense of continuity, consistency of the self, and contact with themselves as well as thanks to high global self-esteem and a positive view of their morals and competence.

#### Discussion

If transsituational repetitiveness of the contents of various self-characterizations resulted from their importance, general character, or permanence (which would suggest their identity status), it could be of significance to identity-related senses. That would suggest some kind of continuity or affinity between the processes of unification of characteristics revealed in different contexts and the processes of building a sense of self-unity. The obtained result contradicts this and, consequently, calls into question the general connections, suggested in the literature on the subject, between a consistent, undifferentiated self-concept and the sense of identity.

The result we obtained, suggesting the independence of the two areas of personality, is in line with the views of self-concept as mere “material” for building one’s own identity, and the content similarity of its various aspects as another aspect of personality organization rather than as a subjective multidimensional sense of identity. The result also coincides with the findings of earlier studies, where different measures of identity were used – J. E. Marcia and M. D. Berzonsky’s (Suchańska & Ligocka, 2011), as well as with the results of research on the relations between self-complexity and self-concept clarity (Campbell et al., 2004) using a measure referring to the sense of consistency and stability of the self. Incidentally, it is worth noting that, in this context, it seems reasonable to suggest that the terms “non-differentiation” or “self-consistency”

should be retained in descriptions of content similarity between self-subconcepts whereas the term “integration” should refer to developing a complex, many-sided self-concept structure in a manner ensuring a sense of relative continuity and consistency of one’s own identity. The many-sided structure may, after all, be more or less homogeneous, but it is diversity that requires integration. Integration is a problematic term also from the linguistic and theoretical points of view, since a structure with no differentiation is, quite obviously, consistent, and a perfectly consistent, undifferentiated self-concept would rather imply dysfunctional rigidity (Lutz & Ross, 2003; Sheldon & Emmons, 1995).

What additionally argues for the psychological distinctness of self-complexity and the sense of identity is their radically different relations with self-esteem. Exceptional against the whole picture is the co-occurrence of self-complexity with competence self-assessment, which is both unobvious and intriguing. The intuitive interpretation, according to which a complex and differentiated self-concept enables flexible adjustment to the demands of various situations and tasks as well as greater efficiency in performing various roles, would require a specially planned empirical verification.

Cluster analysis revealed the possible existence of specific nonlinear interrelations between the two analyzed areas of personality, bringing new important observations. The distinguishing of groups with different combinations of self-complexity and sense of identity dimensions shows that a many-sided and differentiated self-concept may be integrated into such self-experience that ensures a sense of consistency, stability, separateness, and accessibility of identity content. The differentiation of self-concept does not, therefore, have to signal identity problems; quite the contrary: constituting a kind of cognitive challenge, it may stimulate constructive reflection on building one’s own identity.

No such effect is observed at a lower level of self-complexity, although in this case some differentiation is also possible as regards the strength of identity-related senses and self-esteem (the lowest self-esteem, also in the sphere of morals and competence, was found among individuals with the least integrated identity). Thus, when it comes to the adaptive value of the three described types of configurations of variables, what determines the quality of their functioning is, apart from a clear difference in the degree of self-complexity between Cluster 2 and the other two clusters, mainly the level of identity-related senses and global self-esteem, as well as the self-assessment of one’s competence and of consonance between one’s declared values and conduct.

Summing up, the attempt to determine the meaning of the specific types of interrelations between self-complexity and the dimensions of identity observed

in the three clusters suggests that a self-concept of low complexity stimulates a striving to work out an integrated sense of identity to a smaller extent than a more complex self-concept does. At the same time, at low self-complexity, some differentiation of the degree of identity integration is possible, which results in self-esteem differences. It is worth noting that self-esteem and, in some sense, adjustment value are the highest for the configuration with the highest self-complexity and the most integrated identity. In the light of these data, it would be going too far to suggest that high differentiation of self-concept should be regarded as a sign of personality disintegration (Donahue et al., 1993). Individuals combining a many-sided, differentiated self-concept with a strong sense of self-unity, stability, consistency, their own separateness and uniqueness as well as certainty as to who they are rate their capabilities the highest. They exemplify people with considerable self-knowledge, flexibly using the attributes of their personality, without a sense of confusion or chaos. The extent of changeability they manifest does not violate what they regard as fundamental in the axiological, professional, or social spheres, which is shown by their high self-rating on morals and competence.

Commenting on the observed relations between the sense of identity and self-esteem, it is necessary to stress their potential bidirectionality. Self-esteem (also concerning the moral sphere) may be an effect or a source of harmony in the sphere of identity-related senses. The literature contains a thesis on the significance of identity development to self-esteem (e.g., Schwartz et al., 2010), but this is not the only position on the issue. According to Epstein, for instance, "High consistency of identity may testify to the high efficiency of self-esteem as a factor regulating the processing of information about oneself" (as cited in: Fecenec, 2008, p. 23, translation ours). This interpretation would allow to regard self-esteem as a factor determining the integration and sense of identity irrespective of the degree of self-complexity, which seems no less interesting. However, as long as we operate within an *ex post facto* correlative model, this relation should be considered mutual.

The conclusions we proposed have certain limitations and, for several reasons, require further verification. First of all, they can only be generalized to the population of students in a specific type of studies. Caution in drawing conclusions is necessary also due to the *H* index, proposed by Linville (1987), used in the measurement of self-complexity. Although, as shown above, it has advantages that other methods of studying the structure of self-concept lack, the question of its informative value has not been completely resolved. Admittedly, the *H* statistic correlates positively with the number of generated self-aspects, but data

concerning its relations with content overlap between them are far less clear (Brown & Rafaeli, 2007; Constantino et al., 2006; Luo, Watkins, & Lam, 2009). Therefore, the next step should be the repetition of the study with the use of other measures of the structural characteristics of self-concept.

### Conclusion

At the present stage of research, it is legitimate to make a general conclusion that no systematic relations exist between self-complexity and integrated sense of identity or between self-complexity and self-esteem. This would seem to imply that self-concept may comprise diverse or even contradictory contents or undergo considerable change without affecting the individual's identity (cf. Oleś, 2008; Suchańska & Ligocka, 2010). At the same time, however, several variants of organization of the structural dimensions of self-concept and sense of identity are possible. The co-occurrence of very complex self-concept with an integrated sense of identity as well as of lower self-complexity with a more or less lowered level of identity-related senses provokes reflection on the psychological meaning of these relations, and intuitive attempts at interpreting them open up further paths for exploring the significance of self-complexity level to the processes of forming a sense of identity.

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