Chapter 2

Identity Processes and Identity Senses: Does Self-Complexity Matter?

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There is an agreement in modern personality psychology that the self-concept consists of a number of sub-conceptions which change depending on the situational context, role or relations with others (e.g., Kihlstrom & Cantor, 1984; Linville, 1987; Donahue, Robins, Roberts, & John, 1993; Kihlstrom, Beer, & Klein, 2002; Trzebińska & Dowgiert, 2005; Roberts, 2007; Suszek, 2007; Oleś, 2008). During over 20 years of research it has been proved that there are individual differences in the number and diversity of self-aspects. However, the functionality of these features of the self-structure proved to be different depending on their operationalization and measurement. The identity formation process comes especially to the foreground when the individual shifts between various roles and social contexts. Historically, achieving a sense of personal identity was considered a critical task of adolescence. Today however, the major struggles of identity fall upon emerging adults (Arnett, 2000). The confrontation with other developmental tasks, besides forming identity, and the experiences and consequences of turning points during emerging and young adulthood (e.g., marriage, military service, leaving home) may go hand in hand with the growing complexity of the self. Determining which intraindividual processes underlie integration within the self becomes thus of crucial importance.

When answering the question: what kind of person am I on the job, at home or among friends, people describe their selves as objects of knowledge (cf. James, 1890). It has not yet been established if certain structural characteristics of the self-concept are connected with the way of experiencing self-consistency, self-uniqueness etc., or are they independent areas. From the
cognitive standpoint, personal identity comprises those contents which are key for defining oneself and differentiating the self from the non-self. These contents as more stable than the others are expected to manifest themselves in different roles and situations. It may be assumed that such a repeatability and continuity of the self-expression would impact the subjectively experienced self-stability or self-consistency. If this was the case, one would agree with the thesis that a small differentiation of self-aspects is connected with the sense of identity (Styla, Jankowski, & Suszek, 2010). However, it seems also just to expect this relation to depend on particular personality dispositions. Our previous research results are in favour of this assumption as we have noticed that, among people with high self-complexity, those with high level of narrative inclination showed a more integrated identity (Suchańska & Ligocka, 2011). This finding led to the main hypothesis of this study, that the relations between the self-concept structure and the sense of personal identity depend on personality characteristics or processes which have integrating functions towards the self-concept contents.

Susan Krauss Whitbourne and her co-workers (e.g., 1998, 2002, 2003) state that assimilation, accommodation and balance should be regarded as processes determining the integration of information about oneself in building personal identity. The author determines identity as a broad biopsychosocial self-definition which includes the self-representations in various areas of physical, psychological, and social functioning and as a structure of self-organizing cognitive-affective schemes through which the individual experiences are interpreted (Whitbourne, Sneed, & Skultety, 2002). Identity assimilation is a process used for maintaining the sense of internal consistency. It refers to the interpretation of new experiences through the existing identity schema and can lead to ignoring information inconsistent with it. The accommodation process, by contrast, involves modifying the cognitive-affective schemes in response to information inconsistent with them. A significant susceptibility to external factors and, in consequence, a fragile sense of identity, are connected with preferring accommodation. Identity balance is a process of dynamic balancing of assimilation and accommodation. A mature person usually reacts to new experiences by trying to fit it (assimilate) into his or hers current self-schemas, yet retains the sufficient self-flexibility. This means being open to changes and at the same aiming at maintaining self-consistency which preserves the sense of identity. Therefore, elastic use of both processes is considered to be an optimal way of developing identity (Whitbourne & Collins, 1998; Whitbourne et al., 2002).
Identity processes, which are usually activated situationally, may become the habitual ways of dealing with information about oneself (Whitbourne & Collins, 1998). In both cases they have major consequences for one’s sense of identity and self-esteem. Previous research showed that identity assimilation and balance predict increases in self-esteem and decreases in depressive symptoms, whereas the opposite is true for identity accommodation (e.g., Whitbourne et al., 2002; Sneed & Whitbourne, 2003; Weinberger, 2009). Moreover, identity assimilation was found to be negatively related to self-reflection (described as neurotic self-awareness) and identity accommodation to be positively related to self-reflection and negatively related to internal state awareness. Identity balance alone was positively associated with internal state awareness, which reflects an adaptive self-consciousness and facilitates the identity formation process (Sneed & Whitbourne, 2003; Berzonsky & Luyckx, 2008).

It is puzzling if the identity processes described above play a similar role in the case of integrating contents which are currently coexisting in a complex self-concept. If it is valid to assume that a mature sense of identity requires some kind of integration of the self-concepts (varying across different social contexts or roles), there are already indicators that the similarity of their contents is not such an understood form of integration (Suchańska & Ligocka, 2011; Suchańska & Worach, 2012).

**Aim of the Research**

The empirical analysis attempts to answer the following questions:

1. Are there any relations connecting the structural characteristics of the self-concept and the sense of personal identity? If yes, what are they?
2. Are there any relations connecting the identity processes and the sense of personal identity? If yes, what are they?
3. Do the identity processes have a moderating role in the relations between the structure of the self-concept and the sense of personal identity?

The study by Donahue and team (1993) proved a high adaptive value of the self-concept consistency and gave reasons to expect that the less complex and diverse the self-concept is, the stronger the sense of identity is (H1). However, our own research and a theoretical differentiation between an objective conceptualization of the self-concept as a bundle of self-attributes and a subjective self-experience indicate that they are two different perspectives which can remain independent. The different identity processes as described and theorized by Whitbourne and co-workers (1998, 2002) should substantially...
explain the variance of the identity senses, particularly the sense of coherence, stability, accessibility and valuation of identity contents. In line with Whitbourne’s theory, we hypothesize that people with an integrated sense of identity will mostly use the processes of assimilation and balance whereas among those with a low integration of identity senses accommodation will dominate (H2). Finally, if we assume that the sense of identity is also built by means of processes which integrate the different self-aspects and consider the identity balance as one of such processes we can expect it to have a intermediary role in relations between the self-concept structure and the identity senses (H3).

Method

Participants
Participants were 118 female (53.4%) and male (46.6%), with the mean age of 24.64 years (SD = 3.22). They were university students of different specializations and professionals with degrees in exact sciences or humanities. The sex ratio was equal, χ²(1) = .54, p > .05.

Measures

Identity structure. The Multidimensional Identity Questionnaire (MIQ) by Pilarska (2012a) was used to measure six dimensions of the identity structure – accessibility, specificity, separation, coherence, stability and valuation of the identity contents, connected with the six senses of identity, that is the sense of internal content, uniqueness, separateness, coherence, continuity in time and self-worth. The questionnaire consists of 43 items, graded in a four-degree scale ranging from definitely no/never to definitely yes/always. The alpha Cronbach reliability indicators reached the following values for particular sub-scales: accessibility α = .79, specificity α = .79, separateness α = .66, coherence α = .86, stability α = .74, valuation α = .74 (cf. Pilarska, 2012a).

Self-complexity. Linville’s Self-complexity Questionnaire in its Polish version by Barczak, Besta, and Bazińska (2007) was used to measure self-complexity. The participants task was to point out the roles they play in life and assign each of it some adjectives from a list of 60 items (30 positive and 30 negative).

3 A version of MIQ modified by the author was used. The sub-scale of identity content stability was developed in order to improve its internal consistency and widen the range of thoughts, feelings or actions the items in this scale refer to.
Based on these trait sorts, a self-complexity score was calculated using the H-statistic, which captures the number of groups created by the participant as well as the redundancy level between their content. Some reports have raised questions about the construct validity of Linville’s operationalization of self-complexity (Rafaeli-Mor, Gotlib, & Revelle, 1999; Sakaki, 2004). The criticisms became the basis for developing such a measure of self-complexity that distinguishes its two components: the number of self-aspects and the degree of overlap in their content. The data obtained in this questionnaire were therefore also used for calculating the alternative self-complexity measures: role overlap (OL) and the number of self-aspects (n aspects) as suggested by Rafaeli-Mor, Gotlib, and Revelle (1999) and self-complexity index (SC-statistic) according to Sakaki’s (2004) proposition. The corresponding formulas are presented in Table 1.

Table 1
Formulas for Calculating Self-Complexity

\[
OL = \frac{\left(\sum_i \left(\sum_j C_{ij}/T_j\right)\right)}{n*(n-1)},
\]
where \( C \) is the number of common features in 1 aspects; \( T \) is the total number of features in the referent aspect; \( n \) is the total number of aspects in the person’s sort and \( i \) and \( j \) vary from 0 to \( n \) (\( i \) and \( j \) unequal).

\[
H = \log_2 n - \left(\sum \log_2 n_i\right)/n,
\]
where \( n \) is the total number of features (here 60), and \( n_i \) is the number of features that appear in a particular group combination.

\[
SC = NSA/OL,
\]
where NSA is the total number of aspects in the person’s sort and OL is the person’s overlap score.

Identity processes. The Identity and Experience Scale (IES) by Whitbourne and co-workers (2002) in its Polish version by Suchańska and Jawłowska (2010, as cited in Jawłowska, 2010) was used for measuring the identity processes. This tool consists of 33 statements, 11 for each scale: assimilation (e.g., “When it comes to understanding myself, I’d rather not look too deeply”), accommodation (e.g., “Very influenced by what others think”) and balance (e.g., “Often take stock of what I have or have not accomplished”). The participants respond on a seven-point scale from definitely no to definitely yes. The reliability indicators
for three sub-scales of the Polish version of IES were: \( \alpha = .70 \) for assimilation, \( \alpha = .83 \) for accommodation and \( \alpha = .82 \) for balance.

**Procedure**

The study was conducted in a collaborative mode, ensuring anonymity and confidentiality. The participants were informed about the purpose of the study. The consent of each person examined was the condition of participation in the research. All participants received identical instructions and filled consecutively the *Multidimensional Identity Questionnaire*, the *Self-complexity Questionnaire*, and the *Identity and Experience Scale*.

**Results**

*Descriptive Statistics and Gender Differences*

Table 2 gives a basic statistical description of the data obtained. The results of the Kolmogorov-Smirnov test show that the distribution of valuation \( Z = 1.55, p < .05 \) as well as all measures of self-complexity \( Z = 1.88, p < .01 \) for H-statistic, \( Z = 1.66; p < .01 \) for OL, \( Z = 3.43, p < .001 \) for SC-statistic, and \( Z = 2.00, p < .001 \) for n aspects) deviate significantly from the normal distribution. The sex differences (evaluated by the Student \( t \) test or the Mann-Whitney U test) have been found for accessibility \( M_{men} = 11.47 [SD = 2.44] \) vs \( M_{women} = 9.97 [SD = 1.87] \), \( t(116) = 3.78, p < .001, d = .70 \), separateness \( M_{men} = 11.67 [SD = 2.96] \) vs \( M_{women} = 10.45 [SD = 2.82] \), \( t(116) = 2.29, p < .05, d = .43 \), coherence \( M_{men} = 21.09 [SD = 4.94] \) vs \( M_{women} = 17.98 [SD = 4.42] \), \( t(116) = 3.60, p < .001, d = .67 \), valuation \( M_{men} = 12.71 [SD = 3.26] \) vs \( M_{women} = 11.29 [SD = 2.75] \), \( U = 1143.00, p < .001, g_r = .34 \) and accommodation \( M_{women} = 47.01 [SD = 11.20] \) vs \( M_{men} = 37.01 [SD = 10.20] \), \( t(116) = 5.04, p < .001, d = .94 \). No significant sex differences in other variables were noticed.

*Analysis of the Relations Between Self-Concept Structure and Personal Identity*

Table 2 presents the intercorrelations between all of the variables included in the analysis. Note should be made of the clear pattern of positive correlations between all identity dimensions and balance. Strong positive relations between balance and valuation, \( r = .67, p < .001 \), \( r^2 = .45 \), coherence, \( r = .54, p < .001 \), \( r^2 = .29 \), and stability, \( r = .54, p < .001 \), \( r^2 = .29 \), are particularly interesting. A contrary pattern of correlation is observed in reference to accommodation.
The strongest relations are between accommodation and coherence, $r = -.64$, $p < .001$, $r^2 = .41$, accessibility, $r = -.55$, $p < .001$, $r^2 = .30$, and valuation, $r = -.55$, $p < .001$, $r^2 = .30$. The relationships between assimilation and identity dimensions prove to be analogous to the ones observed in balance. However, they are mostly weak and moderate. The strongest relation is observed between assimilation and coherence, $r = .44$, $p < .001$, $r^2 = .19$. None of the correlations between the structural features of the self-concept and the dimensions of the identity structure reached the significance level. However, a weak negative correlation can be observed between the SC-statistic and accommodation, $r = -.21$, $p < .05$, $r^2 = .04$.

Table 2
Zero-order Correlation Matrix, Means, and Standard Deviations for All Variables

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<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>10</th>
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<td>.27**</td>
<td>.69***</td>
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<td>-.35***</td>
<td>-.64***</td>
<td>-.39***</td>
<td>-.55***</td>
<td>-.24**</td>
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</tr>
<tr>
<td>Balance</td>
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<td>.37***</td>
<td>.22*</td>
<td>.54***</td>
<td>.54***</td>
<td>.67***</td>
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<td>.02</td>
<td>.08</td>
<td>.04</td>
<td>.13</td>
<td>.03</td>
<td>.17</td>
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<td>-.07</td>
<td>.10</td>
<td>.01</td>
<td>-.08</td>
<td>-.05</td>
<td>-.15</td>
<td>-.07</td>
<td>.06</td>
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<td>.03</td>
<td>-.13</td>
<td>.06</td>
<td>.04</td>
<td>.10</td>
<td>-.04</td>
<td>-.21*</td>
<td>.06</td>
<td>.16</td>
<td>-.33***</td>
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<td></td>
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<tr>
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<td>.05</td>
<td>.08</td>
<td>-.05</td>
<td>.05</td>
<td>.10</td>
<td>-.01</td>
<td>.06</td>
<td>.08</td>
<td>.35***</td>
<td>-.12</td>
<td>.52***</td>
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</tr>
<tr>
<td>M</td>
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<td>12.86</td>
<td>11.02</td>
<td>19.43</td>
<td>15.92</td>
<td>11.95</td>
<td>39.24</td>
<td>42.35</td>
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<td>0.19</td>
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</tr>
<tr>
<td>SD</td>
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<td>3.31</td>
<td>2.93</td>
<td>4.90</td>
<td>3.54</td>
<td>3.07</td>
<td>9.17</td>
<td>11.81</td>
<td>10.30</td>
<td>0.97</td>
<td>0.19</td>
<td>127.82</td>
<td>2.13</td>
</tr>
</tbody>
</table>

*** $p < .001$, two-tailed. ** $p < .01$, two-tailed. * $p < .05$, two-tailed
The next step was to establish if different configurations of structural characteristics of identity differ in the intensity of identity processes and in the degree of self-complexity. A cluster analysis revealed four distinct identity profiles. An ANOVA (or a nonparametric equivalent) showed significant differences between the obtained clusters for each dimensions of identity (cf. Table 3). Figure 1 illustrates the obtained taxonomy.

Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster 1 (n = 32)</th>
<th>Cluster 2 (n = 46)</th>
<th>Cluster 3 (n = 25)</th>
<th>Cluster 4 (n = 15)</th>
<th>F (3,114) or x2(3)</th>
<th>Post hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>12.75 (1.92)</td>
<td>10.98 (1.20)</td>
<td>9.16 (1.52)</td>
<td>7.80 (1.86)</td>
<td>62.39***</td>
<td>4, 3 &lt; 2 &lt; 1</td>
</tr>
<tr>
<td>Specificity</td>
<td>15.00 (3.16)</td>
<td>12.41 (2.98)</td>
<td>13.00 (2.48)</td>
<td>9.45 (2.65)</td>
<td>13.14***</td>
<td>4 &lt; 2, 3, 1; 2 &lt; 1</td>
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<tr>
<td>Separateness</td>
<td>13.46 (2.27)</td>
<td>10.33 (2.14)</td>
<td>9.64 (3.43)</td>
<td>10.27 (2.55)</td>
<td>13.81***</td>
<td>3, 4, 2 &lt; 1</td>
</tr>
<tr>
<td>Coherence</td>
<td>24.47 (2.72)</td>
<td>19.88 (2.43)</td>
<td>15.50 (3.60)</td>
<td>13.87 (4.87)</td>
<td>55.86***</td>
<td>4, 3 &lt; 2 &lt; 1</td>
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<tr>
<td>Stability</td>
<td>18.81 (2.39)</td>
<td>17.13 (2.03)</td>
<td>12.88 (1.42)</td>
<td>11.13 (3.42)</td>
<td>61.47***</td>
<td>4, 3 &lt; 2 &lt; 1</td>
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<tr>
<td>Valuation</td>
<td>14.59 (1.86)</td>
<td>12.07 (1.84)</td>
<td>11.80 (1.73)</td>
<td>6.20 (1.90)</td>
<td>71.53***</td>
<td>4 &lt; 3, 2 &lt; 1</td>
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</table>

*** p < .001

Figure 1

Illustration of Clusters of the Characteristics of Identity Structure (Standardized Values)
The analysed clusters differ significantly in all identity processes (cf. Table 4). The F values were $F(3, 114) = 5.71$, $p < .001$, $\eta^2 = .13$, $f = .39$ for assimilation, $F(3, 114) = 21.76$, $p < .001$, $\eta^2 = .36$, $f = .75$ for accommodation, and $F(3, 114) = 19.03$, $p < .001$, $\eta^2 = .33$, $f = .70$ for balance. The eta-squared values show that the division into subgroups with diverse profiles of identity structure explain 13% of assimilation variance, 36% of accommodation variance, and 33% of identity balance variance. The relation between specific identity structure and the intensity of identity processes is therefore evident. Cluster 4 is characterized by the highest average level of accommodation, $M = 54.80$ ($SD = 12.23$), whereas cluster 1 by the lowest, $M = 32.19$ ($SD = 9.24$). In the scope of assimilation and balance, the highest levels are observed for cluster 1, $M = 43.50$ ($SD = 8.33$) and $M = 61.94$ ($SD = 8.65$), respectively, and the lowest for cluster 4, $M = 33.53$ ($SD = 12.03$) and $M = 42.20$ ($SD = 9.37$), respectively.

Table 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster 1 (n = 32)</th>
<th>Cluster 2 (n = 46)</th>
<th>Cluster 3 (n = 25)</th>
<th>Cluster 4 (n = 15)</th>
<th>$F (3,114)/\chi^2(3)$</th>
<th>Post hoc</th>
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<td>33.53 (12.03)</td>
<td>5.71***</td>
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<td>Accommodation</td>
<td>32.19 (9.24)</td>
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<td>54.80 (12.23)</td>
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<td>1 &lt; 2, 3 &lt; 4</td>
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<td>Balance</td>
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<td>53.37 (8.20)</td>
<td>53.08 (8.40)</td>
<td>42.20 (9.37)</td>
<td>19.03***</td>
<td>4 &lt; 3, 2 &lt; 1</td>
</tr>
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<td>H</td>
<td>1.35 (.72)</td>
<td>1.17 (1.33)</td>
<td>1.33 (.67)</td>
<td>1.22 (.47)</td>
<td>.26</td>
<td>-</td>
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<tr>
<td>OL</td>
<td>.19 (.18)</td>
<td>.20 (.17)</td>
<td>.16 (.018)</td>
<td>.22 (.25)</td>
<td>.43</td>
<td>-</td>
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<tr>
<td>SC</td>
<td>46.46 (60.04)</td>
<td>67.17 (185.88)</td>
<td>61.41 (77.49)</td>
<td>29.91 (22.54)</td>
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<td>-</td>
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<td>5.00 (2.34)</td>
<td>4.84 (2.10)</td>
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<td>.26</td>
<td>-</td>
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*** $p < .001$
Analysis of the Intermediary Role of Identity Processes in the Relation Between the Self-Concept Structure and Personal Identity

The above analyses indicated a clear relation between the identity structure and identity processes. At the same time they pointed out the lack of relation with self-complexity (regardless of the method of its operationalization). Taking these results into account, we examined whether the identity processes have a moderating role in the relation between the self-concept structure and the personal identity. A hierarchical regression was used with the following predictors: identity processes and SC-statistic as the indicator of self-complexity4 (step 1) and their interactions (step 2). The significant interaction effects were supplemented with simple effect tests. The obtained results are presented in Table 5.

Table 5
Hierarchical Regression Main Effects and Interactions

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Accessibility</th>
<th>Specificity</th>
<th>Separateness</th>
<th>Coherence</th>
<th>Stability</th>
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<td>.03</td>
</tr>
<tr>
<td>Assimilation β</td>
<td>.26**</td>
<td>-.22*</td>
<td>.21*</td>
<td>.30***</td>
<td>.18*</td>
<td>.05</td>
</tr>
<tr>
<td>Accommodation β</td>
<td>-.39***</td>
<td>-.27*</td>
<td>-.35***</td>
<td>-.45***</td>
<td>-.16*</td>
<td>-.31***</td>
</tr>
<tr>
<td>Balance β</td>
<td>.27**</td>
<td>.35***</td>
<td>.03</td>
<td>.35***</td>
<td>.51***</td>
<td>.51***</td>
</tr>
<tr>
<td>SC*Assimilation β</td>
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<td>-.06</td>
<td>-.04</td>
<td>.01</td>
<td>.03</td>
<td>-.18</td>
</tr>
<tr>
<td>SC*Accommodation β</td>
<td>.17</td>
<td>.16</td>
<td>-.72*</td>
<td>.15</td>
<td>.29</td>
<td>.14</td>
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<tr>
<td>SC*Balance β</td>
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<td>-.08</td>
<td>-.35</td>
<td>.22</td>
<td>.15</td>
<td>-.05</td>
</tr>
<tr>
<td>Corrected R2</td>
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<td>.21***</td>
<td>.18***</td>
<td>.57***</td>
<td>.37***</td>
<td>.51***</td>
</tr>
<tr>
<td>ΔR2</td>
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<td>.01</td>
<td>.03</td>
<td>.01</td>
<td>.01</td>
<td>.02</td>
</tr>
</tbody>
</table>

*** p < .001, ** p < .01, * p < .05, a p < .10

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4 The choice of the SC-statistic as an indicator of self-complexity was made because of the drawbacks of the H-statistic widely discussed in the literature (including the statement about its inconsistency with the theory it originates from) as well as its mathematical simplicity (cf. Rafaeli-Mor, Gotlib, & Revelle, 1999; Rafaeli-Mor & Steinberg, 2002; Luo & Watkins, 2008; Luo, Watkins, & Lam, 2009).
According to the analyses, all regression models are significant. The variables in the regression equation explain 44% of accessibility variance, \( F(7, 101) = 12.53, p < .001, \, f^2 = .80, \) 21% of specificity variance, \( F(7, 101) = 4.84, p < .001, \, f^2 = .27, \) 18% of separateness variance, \( F(7, 110) = 4.26, p < .001, \, f^2 = .23, \) 57% of coherence variance, \( F(7, 101) = 20.20, p < .001, \, f^2 = 1.33, \) 37% of stability variance, \( F(7, 101) = 9.47, p < .001, \, f^2 = .59, \) and 51% of valuation variance, \( F(7, 101) = 16.01, p < .001, \, f^2 = 1.04. \) At the same time, introducing the interaction terms between SC and identity processes did not result in a significant rise in variance explained in all cases. However, self-complexity proved to be a significant predictor of the sense of separateness, \( \beta = -.59, t = -2.23, p < .05. \) Moreover, one of the interaction effects was marginally significant, that is the interaction between SC and accommodation towards separateness, \( \beta = -.72, t = -1.96, p = .053. \) With an average, \( t(98) = -2.23, p < .05, \) and high, \( t(98) = -1.97, p = .052, \) level of accommodation, the increase in self-complexity level allows for predicting a decrease in identity content separateness, whereas with a low level of accommodation, the increase in self-complexity allows for, in a marginally significant way, predicting an increase in the sense of one's separateness, \( t(98) = 1.95, p = .054. \)

Referring to other identity dimensions, only identity processes proved to be their significant predictors. Identity accommodation is the strongest predictor of accessibility, \( \beta = -.39, t = -4.55, p < .001, \) and coherence, \( \beta = -.45, t = -5.98, p < .001, \) whereas balance is the strongest predictor of specificity, \( \beta = 0.35, t = 3.33, p < .01, \) stability, \( \beta = .51, t = 5.50, p < .001, \) and valuation, \( \beta = .51, t = 6.22, p < .001. \) Assimilation proved to be a weaker predictor than the other identity processes. While interpreting the obtained data, we can generally assume that the higher the intensity of identity balance and assimilation and the lower the intensity of accommodation are, the higher the sense of accessibility, specificity, separateness, coherence, stability and self-worth are.

**Discussion**

In the light of the research results the thesis about a negative relation between a complex and diverse self-concept and sense of identity cannot be supported. All four measures of self-complexity and dimensions of identity proved to be mutually independent. Also the types of identity structure did not differ in the measures of self-complexity. In the context of previous research on the relations between the self-concept structure and identity (cf. Suchańska & Ligocka, 2011) these results may be considered as decisive. It is also worth noting that the
mutual independence of the self-structure and the sense of personal identity is observed regardless of the operationalization method of the latter (Suchańska and Ligocka used Marcia’s (1966) identity status approach and Berzonsky’s (2008) identity styles model).

How can one explain the fact that the number and degree of diversity of the self-concept facets presented in different social situations do not have any impact on the sense of identity? Are the ways we describe and experience ourselves two entirely separate areas? Maybe as long as we recognise this variety in ourselves it does not change who we are. It would suggest that the construct of self-complexity should be clearly distinguished from phenomena such as multiple identity or self-fragmentation. This observation has particular meaning in the context of conclusions drawn, for example, by Donahue and co-workers (1993), that differentiation of the self-concept “implies fragmentation and a lack of coherence in the self-concept – in other words, a divided self” (p. 844). It is a fact that past empirical attempts to establish the relation between self-complexity and adaptation have not produced straightforward results. Possibly, this resulted from limiting these research to an objectively conceptualized self-concept, without including a subjective experience of one's self. At the same time, more consistent research results for the adaptive value of another measure of the self-concept structure, that is self-concept differentiation (Donahue et al., 1993), point our attention to the measurement method. It is interesting that changing the operationalization of the same aspect of the self structure – the contextual character of the self-image lead to such different conclusions. It is difficult to explain this discrepancy on the basis of the previous observations. This issue is the subject of the further research we are currently carrying out.

The hypothesis about the relation between identity processes and the sense of personal identity proved to be valid and applies to particular aspects of the sense of identity as well as their configurations (structures) obtained in the research. The integrated structure, which consisted of a high sense of coherence, stability, accessibility, specificity, separateness and valuation of identity contents was characterized by higher levels of identity balance and assimilation and lower level of identity accommodation than the other configurations. It should also be highlighted that the pattern of differences in the intensity of identity processes between the distinguished clusters suggests that the differences are a derivative of the level of particular aspects of identity structure as well as of their organisation.

The obtained relations of identity processes and the sense of personal identity are consistent and constitute a support for the functions of these processes theoretically assumed by Whitbourne (e.g., 1998, 2002, 2003). At the same time,
a negative relation between self-complexity (SC-statistic) and accommodation can, at first glance, appear surprising. This relationships can be explained by regression analysis results. An increase in self-complexity as well as an increase in accommodation prove to be predictors of a decrease in the sense of one’s own boundaries. Moreover, accommodation proves to be a significant moderator of the relation between self-complexity and the sense of separateness. These results in connection with the observed correlative relation of the SC-statistic and accommodation suggest that at high self-complexity young adults will have a tendency to avoid the accommodation process as its increase endangers the sense of separateness, whereas its decrease strengthens it.

Although the research results described above confirm the theoretically assumed function of identity processes, the regressive analyses which verified their intermediary role in the relation between the self-concept structure and the sense of identity did not produce the expected results. Accommodation as well as balance proved to be good predictors of most of the identity senses which corresponds with the results of cluster analyses described above. However, their moderating function towards self-complexity was observed only for the sense of separateness. We might have expected that a significant increase in the accommodation processes leads to a situation in which the more complex the self is the more difficult it is to obtain a sense of separateness. This result corresponds with what has been reported by other authors connecting the contextual character of the self with a low sense of separateness (e.g., Markus & Kitayama, 1991; Pilarska, 2012b).

To sum up, the presented research undoubtedly reveal the complexity of the issue of the mutual relations of the self-concept and identity. Contrarily to the suggestions present in literature, the carried out analyses speak in favour of accepting the thesis about independence of the formal characteristics of the self-concept and the sense of identity. This might argue against the postmodernist view that a flexible and changing self-concept is conducive to young people’s liquid or fluid identity formation. However, it is difficult at this stage of our study to decide if there are no, even indirect relations between the complexity of the self and the sense of personal identity or is this the result of the choice of moderating variables made during the research.
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