Identity processes and statuses in post-Soviet Georgia: Exploration processes operate differently

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A B S T R A C T

Identity formation is one of the main developmental tasks of emerging adulthood. Based on quantitative data on a five-dimensional model of identity formation, we concluded that the identity formation process has some different features in the Republic of Georgia than it does in many Western countries. Results obtained from young Georgian adults (N = 295, 82.6% female) yielded four exploration processes instead of three, which is in line with the recent Swiss findings. A key difference between Georgia and the Western contexts, however, is that exploration in breadth is highly correlated with ruminative exploration. Cluster analysis, which produced six identity clusters, also supported this pattern. Achievement, the most adjusted cluster in Western contexts, was relatively low on exploration in breadth. We discuss ways in which the Georgian transition from Soviet communism to a more globalized society may contribute to limited opportunities for identity exploration and may add some tension to the identity development process.

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Introduction

Erikson (1968) defined identity formation as a product of normative development, personal organization of experience, and cultural milieu. Young people interact with their social and cultural environments to develop a sense of self that can sustain a set of life choices and that is responsive to interpersonal relationships and societal standards (Baumeister & Muraven, 1996). For Erikson, identity refers to the person’s goals, values, and beliefs in a number of life domains (e.g., career, relationships, and religious beliefs).

However, the meaning and valence of identity has changed considerably since Erikson’s writings. Over the last half century, many Western countries have transitioned from industrial to technological economies (Kalleberg, 2009), and gender roles have shifted toward egalitarianism (e.g., where both men and women pursue professional careers). Consequences of these shifts have included prolongation of education, frequent job changes, and later ages of entry into marriage and parenthood (Côté, 2000; Côté & Levine, 2014). The years between the end of formal education and the assumption of adult...
responsibilities and commitments have become a time when many young people are relatively uncommitted and spend time exploring potential life options (e.g., possible careers and romantic partners). In many Western countries, these years have been labelled as emerging adulthood (Arnett, 2000, 2012), and emerging adulthood is now the life period in which many Western youth continue to address the task of identity development (Côté & Levine, 2014). Because of the unstructured transition to adulthood, the Western socio-economic and cultural context creates conditions for identity exploration and its prolongation into the late twenties. However, a prolonged period of exploration might not be functional in non-Western contexts with different socio-historical and cultural characteristics (Arnett, 2000). The goal of the present study was to examine the structure of personal identity formation in a non-Western context, namely, post-Soviet Georgia and its connection to psychological adjustment, such as depressive symptoms and anxiety.

Theories of identity development: the identity status model and its extensions

Among the empirically based frameworks introduced based on Erikson’s work, Marcia’s (1966) identity status model has inspired by far the largest research literature (for a review see Kroger & Marcia, 2011). Within the identity status model, two identity dimensions are proposed — exploration and commitment. Exploration refers to the process of evaluating different alternatives within important life areas (occupation, relationships, personal ideology, etc.). Commitment is the process of making a decision to adhere to a specific set of alternatives. The presence or absence of exploration and commitment can be used to derive four identity statuses. Achievement refers to a set of commitments enacted following a period of exploration. Moratorium refers to a period of active exploration during which most commitments are suspended or discarded. Foreclosure represents commitments made without prior exploration. Diffusion represents the absence of commitments, with or without non-systematic (and often short-lived and unsustained) attempts to explore alternatives.

Marcia’s initial model has been extended by a number of process-oriented models, including the five-dimensional (Luyckx, Schwartz, et al., 2008) and three-dimensional identity models (Crocetti, Rubini, & Meeus, 2008). In the present study, we used the five-dimensional identity model proposed by Luyckx, Schwartz, et al. (2008). Luyckx et al. unpacked Marcia’s dimensions of exploration and commitment into two commitment dimensions and three exploration dimensions: commitment making, identification with commitment, exploration in breadth, exploration in depth, and ruminative exploration. Four of these five processes can be grouped into two identity cycles: commitment formation and commitment evaluation (Luyckx, Goossens, & Soenens, 2006). When forming commitments, young people can proactively consider different identity alternatives (exploration in breadth) before deciding to adopt one or more of these (commitment making). This commitment formation cycle represents Marcia’s (1966) original model. The commitment evaluation cycle can be described in terms of two processes as well — exploration in depth and identification with commitment. After individuals have formed commitments, they can start to evaluate these commitments. In so doing, people engage in an in-depth exploration of their commitments (e.g., by gathering additional information or talking with others about the choice made) and, if all goes well, increasingly identify themselves with and grow more certain and confident about these choices (Luyckx, Klimstra, Duriez, Van Petegem, Beyers, et al., 2013).

A fifth dimension of identity formation, ruminative exploration, was added to the model later. As opposed to exploration in breadth and exploration in depth, ruminative exploration is a more dysfunctional type of exploration. Ruminative exploration represents difficulty in settling on satisfying answers to identity questions in spite of continued mental effort to do so, which results in intrusive feelings of uncertainty and incompetence. Studies have indicated that ruminative exploration is associated with maladaptive perfectionism and an avoidant coping strategy (Luyckx, Schwartz, et al., 2008; Luyckx, Klimstra, Duriez, Schwartz, & Vanhalst, 2012; Luyckx, Soenens, Goossens, Beckx, & Wouters 2008).

Based on these five identity dimensions, identity statuses have been derived using cluster analytic methods (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008; Schwartz et al., 2011). Because it is a data-driven approach, cluster analysis is more appropriate than median split procedures that have traditionally been used to classify participants into identity statuses (Steinley & Brusco, 2007). The Achieved status is characterized by high scores on all of the identity processes except for ruminative exploration. Foreclosure is characterized by high levels of the commitment processes and low levels of each of the exploration processes. Searching Moratorium is characterized by high scores on all three exploration processes and moderate to high levels of commitment making and identification with commitment. Troubled Diffusion is low on commitment making and identification with commitment, high on ruminative exploration, and moderate to high on exploration in breadth. These clusters resemble those originally proposed by Marcia (1966). In addition, Luyckx, Schwartz, et al. (2008), Luyckx, Soenens, et al. (2008) found two new clusters: the Carefree Diffusion status is characterized by low levels on all five dimensions, and the Undifferentiated status represents individuals whose scores on all dimensions are close to their respective sample means (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005; Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008). Research conducted using this process-oriented identity status model and adjustment outcomes has indicated that statuses high on commitment dimensions (especially achievement) are linked with the highest levels of well-being. Troubled Diffusion and Searching Moratorium tend to be linked with the highest levels of internalizing symptoms, such as anxiety and depression, whereas Achievement and Foreclosure generally score lowest on these symptoms (Schwartz, Luyckx, & Crocetti, 2014). This process-oriented identity model has been studied in many different national contexts, including Belgium (Luyckx et al., 2006; Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008), the United States (Schwartz et al., 2011), Italy (Crocetti, Luyckx, Scrignaro, & Sica, 2011), Switzerland and France (Zimmermann, Lannegrand-Willems, Safont-Mottay, & Cannard, 2013), and the
Philippines (Pesigan, Luyckx, & Alampay, 2014). Results indicated some differences in patterns of status compositions across these national contexts. For example, it appeared that the Foreclosure status in French students is characterized by a lower level of exploration in breadth compared to their peers in Switzerland. This finding might be explained by the highly structured educational system in France that requires young people to identify to a career path fairly early on (Zimmermann et al., 2013). Further, Achieved individuals in an Italian study were considerably higher on ruminative exploration compared with their Belgian peers, which might be related to more unstable socioeconomic conditions in Italy relative to Belgium (Crocetti et al., 2011).

Identity development in non-Western contexts: the case of post-Soviet Georgia

The expansion of identity research into different cultural contexts, including non-Western contexts, provides an opportunity to ascertain the broad cross-cultural applicability of existing identity models. The post-Soviet bloc is a particularly understudied area of the world in terms of social science research. Rapid social changes in post-communist countries have created specific opportunities for and barriers to individual psychosocial development, such as greater freedom for travel and study than was under the Soviet regime. At the same time, the fall of communism has resulted in increased uncertainty and unpredictability in terms of future plans (Macek, Jezek, & Vazsonyi, 2013).

Georgia is a post-Soviet country, located near the Caucasus Mountains. After achieving independence in 1991, Georgia experienced civil unrest and economic crisis for most of the 1990s. Since 2000, social, political, and economic reforms have begun. However, the country remains in a transitional period. The socio-economic structure does not provide young people with stable opportunities for life planning and making long-term choices, especially in the domain of career development. Young people are usually expected to start working after school or after receiving their bachelor’s degree. Quite often, their field of work is different from their education because job opportunities are limited (Nichol, 2013; Pleines, 2014; Rudaz, 2012).

Along with socio-economic conditions, cultural contexts also structure and present a range of identity options to individuals (Phinney & Baldelomar, 2011). Georgia is regarded as a collectivist type of culture in which family life is structured around strong beliefs in the importance of close kin relationships and continued closeness to one’s nuclear family well into emerging adulthood (Nijaradze, 2001; Surmanidze, 2001; Tsuladze, 2003). Young people generally do not establish an independent residence, sometimes even after marriage. Similarly, college students tend to live at home with their parents. Casual sex or cohabitation with a partner before marriage is regarded as unacceptable, especially for women (Surmanidze & Tsuladze, 2008; Tsuladze, 2003). Parental and other close kinship influences are quite strong in young people’s lives, and, as such, these family relationships may constrain exploration in breadth and encourage commitment making (Beyers & Goossens, 2008; Bosma & Kunnen, 2001; Luyckx, Soenens, Vansteenkiste, Goossens, & Berzonsky, 2007).

Like many non-Western contexts, Georgia has been influenced by globalization resulting in tension between post-Soviet and Western cultural streams. After decades of limited informational and cultural exchange with most of the world, access to information through the Internet and social media has increased rapidly during the last 20 years. Globalization has decreased the importance of national boundaries and has supported the establishment of less traditional and more Western values (Jensen, Arnett, & McKenzie, 2011). These changes are especially evident when comparing value orientations across different age groups in Georgia. Older generations stress the importance of family coherence, preserving traditions, and authoritarian child-rearing practices, whereas younger people emphasize the role of autonomy and goal-directedness (Sumbadze, 2011). This generational “value gap” might be reflected in the process of personal identity formation as well, where contradictory value orientations and lifestyles may increase the difficulty of forming a stable identity. Some authors (Arnett, 2002; Jensen, 2003) have emphasized the influence of increasing globalization on identity formation, such that individualistic, Western cultural influences have pervaded other parts of the world where traditional, hierarchically-based cultural norms have historically dominated.

The present study

Most research on identity formation has been conducted in North America and in Western European countries (Schwartz, Zamboanga, Meca, & Ritchie, 2012). Authors such as Arnett (2008) and Henrich, Heine, and Norenzayan (2010) have argued that the omission of non-Western contexts and individuals from psychological research has biased our knowledge base—meaning that more studies of identity in non-Western contexts are needed. Indeed, understanding the role of cultural context in identity development (Baumeister & Muraven, 1996) requires that diverse cultural contexts be studied. With increasing globalization, research conducted with identity status models has begun to expand beyond the West (Crocetti et al., 2015; Morsünbül, Crocetti, Çök, & Meeus, 2014). The present study represents another step in this direction.

Studying personal identity formation in Georgia would contribute to our understanding of identity within a non-Western context, and would help to shed more light on the role of person-cultural context interplay vis-à-vis the fulfillment of this key developmental task in the transition to adulthood. The cultural-contextual factors that distinguish the Georgian context from those where identity has been commonly studied have the potential to affect the structure of the identity formation task (as reflected in Luyckx et al.,’s 2008, model). For example, exploration in breadth — labelled as a core mechanism underlying identity formation — stems from a rather individualistic approach (Bosma & Kunnen, 2001). Specifically, the person is assumed to reconsider at least some of the values and beliefs with which s/he was raised. Indeed, in one study, items measuring exploration in breadth did not provide an interpretable factor structure in three non-Western, largely collectivist contexts.
The aim of the present study was to investigate, for the first time, identity processes and statuses among young adults in Georgia. We aimed to test Luyckx and colleagues’ (2008) process-oriented model of identity formation in Georgia, and to ascertain the extent to which the identity process is likely to unfold in the same way as in Western Europe and North America. Besides important similarities, some differences are expected to occur given that Georgia is a markedly different context from the countries where identity formation has been studied previously (Goossens & Phinney, 1996; Grotevant, 1987). Based on Erikson’s (1968) assumption that personal identity formation is a product of internal psychological processes as well as socio-cultural factors, we suggest that some aspects of the Georgian context (as discussed above) might function as barriers to exploration in breadth (Yoder, 2000). A young person who is pressured to comply with traditional socio-cultural norms, and whose environment does not provide sufficient occupational opportunities may find exploration in breadth stressful and frustrating. We thus hypothesized that, among Georgian young adults, exploration in breadth might be associated with internalizing symptoms.

We also aimed to ascertain the extent to which the identity task is related to psychosocial functioning in ways that would be expected based on the identity status model and its extensions. For example, commitment processes should be linked with adaptive psychosocial functioning, and ruminative exploration should be linked with maladaptive psychosocial functioning (cf. Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008; in Belgium; and Schwartz et al., 2011; in the United States).

Considering the above-mentioned characteristics of the Georgian cultural context, we would expect that people in Foreclosure might report similar, or perhaps more favourable, adjustment compared to those in Achievement (in terms of life satisfaction, depression, and anxiety). Further, the Searching Moratorium group might evidence poorer adjustment due to high levels of exploration in breadth. On the other hand, the transitional character of Georgian society providing no stable structure within which to define one’s choices and values, may yield a higher prevalence of Troubled and Carefree Diffusion, in comparison to the committed statuses, than has been observed in Western samples.

In examining these issues empirically, we followed three steps. We first assessed the factorial validity and reliability of the Georgian version of the Dimensions of Identity Development Scale (DIDS). We then investigated the relationships of the identity dimensions with adaptive and maladaptive psychological health outcomes (life satisfaction, depression, and anxiety). Finally, we conducted cluster analysis to examine identity at the typological level. Similar to previous research (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008; Schwartz et al., 2011), we expected to find the six identity clusters enumerated above.

**Method**

**Participants and procedure**

Data were gathered on a sample of 295 Georgian students from social science courses, between the ages of 17–29 (M = 22.3; SD = 3.2). The gender distribution was 82.6% female and 17.4% male. Fifteen percent of participants were married, and 42% were employed. Participants were recruited from the university database on a voluntary basis via e-mail and social networking sites and were directed to the electronic link for the survey. All of the measures were administered as a single online survey. Participants completed the survey electronically and anonymously.

**Measures**

**Personal identity**

Participants completed the Dimensions of Identity Development Scale (DIDS; Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008). The DIDS assesses five identity dimensions in the domain of future plans and lifestyles: commitment making (e.g., “decided on the direction I want to follow in life”), identification with commitment (e.g., “plans for the future offer me a sense of security”), exploration in breadth (e.g., “try to figure out regularly which lifestyle would suit me”), exploration in depth (e.g., “work out for myself if the goals I put forward in life really suit me”), and ruminative exploration (e.g., “doubtful about what I really want to achieve in life”). The DIDS was forward-translated from English into Georgian and back-translated into English by the first and second authors. These two researchers discussed and resolved disagreements regarding the original and back-translated English versions before creating the final Georgian version. All items were answered on a 5-point Likert type rating scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). Cronbach’s alphas in the present Georgian sample were .84 for exploration in breadth, .56 for exploration in depth, .89 for commitment making, .87 for identification with commitment, and .84 for ruminative exploration.

**Anxiety**

The Georgian version of the Spielberger Trait Anxiety Scale (Spielberger, 1989; Georgian translation by Arutinov, Grigolava, Tchitchinadze, & Baratashvili, 1999) contains 20 items. Sample items include “I am content; I am a steady person.” Cronbach’s alpha in the present sample was .71.

**Depressive symptoms**

The Beck Depression Inventory (BDI-II; Beck, Steer, & Brown, 1996; Georgian translation by Arutinov, Grigolava, Badzagua, & Baratashvili, 1999) is a 21-item self-report inventory where each item lists a potential depressive symptom. Sample items
include “I have lost most of my interest in other people or things”. Respondents select from four response choices ordered
from 0 to 3, where 0 represents the lowest agreement and 3 represents the greatest agreement. Cronbach’s alpha in the
current sample was .85.

Life satisfaction

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) contains five items tapping into the extent to
which participants are happy with how their lives have unfolded. Sample items include “I am satisfied with my life”. Cronbach’s alpha in the current sample was .80.

Results

Our analyses consisted of three steps. First, we checked the factorial validity of the DIDS. Second, we computed correla-
tions between identity dimensions and psychological adjustment variables and examined the unique contribution of each
identity dimension to each of the adjustment outcomes via structural equation modelling. Third, we conducted cluster
analysis to extract identity statuses from among the five identity dimensions.

Step 1: factorial validity

We evaluated the five-factor structure of the DIDS using confirmatory factor analysis (CFA) in Mplus 6 (Muthén & Muthén,
1998–2011). Given normality violations in most variables, robust maximum likelihood estimation (MLR) was used. We used
standard structural equation modelling fit indices and criteria to evaluate model fit. The Comparative Fit Index (CFI) evaluates
the improvement in fit for the specified model compared to a null model with no paths or latent variables, and values of .95
(.90) or greater indicate good (adequate) fit. The root mean square error of approximation (RMSEA) evaluates the extent to
which the covariance structure implied by the model deviates from the covariance structure observed in the data, and values of .05 (.08) or lower include good (adequate) fit (Kline, 2010). The chi-square index is reported, but is not used in interpre-
tation because it tests the null hypothesis of perfect fit to the data — which is rarely tenable in even moderately sized samples
(West, Taylor, & Wu, 2012). However, the five-factor model did not converge. We then tested a recently proposed six-factor
model that includes two factors instead of previous exploration in depth factor (Zimmermann et al., 2013). The first factor (items 21 [‘I think about the future plans I already made’] and 22 [‘I talk with other people about my plans for the future’]), which we called reflective exploration in depth, refers to reflecting on commitments that have already been enacted. Because there were only two items, we report the correlation between these items rather than a Cronbach’s alpha value ($r = .26$, $p < .001$). The second factor (item 23 [‘I think about whether the aims I already have for life really suit me’], item 24 [‘I try to find out what other people think about the specific direction I decided to take in my life’], and item 25 [‘I think about whether my future plans match with what I really want’]) represents doubts about existing commitments. According to Zimmermann et al. (2013), this second factor may be labelled as reconsideration of commitment. Cronbach’s alpha for this second factor in the current sample was .68. The resulting six-factor model, with one error correlation specified between two items with quite similar content within the exploration in breadth factor, provided an acceptable fit to the data: $\chi^2(259) = 553.02; \text{CFI} = .90; \text{RMSEA} = .06$. Standardized item loadings for commitment making ranged from .70 to .86, for exploration in breadth from .61 to .83, for ruminative exploration from .64 to .79, for identification with commitment from .68 to .81, for reflective exploration in depth from .30 to .94, and for reconsideration of commitment from .59 to .74. We compared six-factor model against alternative four-factor models. The six-factor model provided a significantly better fit compared to each of the alternative models. These results are summarized in Table 1.

Correlations and structural equation model

Table 2 provides correlations among the six identity dimensions. Commitment making and identification with commitment
were highly correlated. Reflective exploration in depth and reconsideration of commitment were not related to one
another and were differentially associated with other identity dimensions. Reflective exploration in depth was positively
associated with both commitment dimensions, whereas reconsideration of commitment was negatively correlated with the
commitment dimensions. Further, reconsideration of commitment was positively associated with ruminative exploration,
whereas reflective exploration in depth was negatively associated with ruminative exploration. Exploration in breadth was
not significantly correlated with either commitment dimension, but it was positively correlated with ruminative exploration
and with reconsideration of commitment.

Table 3 provides correlations between the identity dimensions and external variables. Commitment making and identification
with commitment were negatively correlated with depression and trait anxiety and positively correlated with life
satisfaction. Exploration in breadth and reconsideration of commitment were positively correlated with depression and trait
anxiety. Exploration in breadth was not significantly correlated with life satisfaction, whereas reconsideration of commitment
was weakly and negatively correlated with life satisfaction. Reflective exploration in depth was negatively correlated
with depressive symptoms and trait anxiety. Ruminative exploration was positively correlated with depression and trait anxiety,
and was negatively correlated with life satisfaction.
To examine the unique predictive value of the six DIDS dimensions vis-à-vis the external variables, we estimated a SEM model where each identity dimension, operationalized as a latent factor (with age and gender as covariates), was allowed to predict life satisfaction, depression and anxiety. The model had adequate fit indices ($\chi^2 = 715.46$, df = 366, RMSEA = .06, CFI = .90). Standardized path coefficients are presented in Table 4. Ruminative exploration was uniquely related to higher levels of depressive symptoms and trait anxiety. Identification with commitment was associated with higher levels of life satisfaction. Women reported higher life satisfaction and higher anxiety than men. Age was negatively related to depressive symptoms and positively to life satisfaction.

Follow-up SEM models, including interactions of identity dimensions with age and gender, yielded five significant interactions based on unstandardized path coefficients (out of the 36 interaction effects examined). Age moderated the relation of ruminative exploration with anxiety ($B = .02$, $p < .05$). Gender moderated the association of ruminative exploration with depressive symptoms ($B = .14$, $p < .05$), the associations of identification with commitment with trait anxiety ($B = .29$, $p < .01$) and life satisfaction ($B = .83$, $p < .05$), and the association of exploration in breadth with life satisfaction ($B = .76$, $p < .05$). Details are presented in Fig. 1.

Cluster analysis

Cluster analysis was conducted on the six identity dimensions using a two-step procedure (Gore, 2000). Prior to conducting the analysis, we removed eight univariate (i.e., values more than 3 SD below or above the mean) and multivariate outliers (i.e., individuals with high Mahalanobis distance values). Solutions with 4–8 clusters were compared. A solution with 6 clusters was selected based on previous research (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008; Schwartz et al., 2011) and explanatory power (i.e., the cluster solution had to explain approximately 50% of the variance in each of the constituting dimensions). In the second step, these initial cluster centres were used as non-random starting points in an iterative $k$-means clustering procedure. Fig. 2 presents the final cluster solution. The cluster solution accounted for 61% of variance in commitment making, 60% in identification with commitment, 51% in exploration in breadth, 60% in ruminative exploration, 36% in reflective exploration in depth, and 50% in reconsideration of commitment. The percentage of explained variance for reflective exploration in depth remained below 50% in the other cluster solutions as well.

Table 2
Descriptive correlations among six identity dimensions.

<table>
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<tr>
<th>Means (SD)</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td>1. Commitment making</td>
<td>3.70(.75)</td>
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<tr>
<td>2. Identification with commitment</td>
<td>3.81(.67)</td>
<td>.63***</td>
<td></td>
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<tr>
<td>3. Exploration in breadth</td>
<td>3.61(.73)</td>
<td></td>
<td>-.03</td>
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<tr>
<td>4. Reflective exploration in depth</td>
<td>3.54(.72)</td>
<td>.43***</td>
<td>.51***</td>
<td>.04</td>
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<tr>
<td>5. Reconsideration of commitment</td>
<td>2.93(.82)</td>
<td>-.25***</td>
<td>-.19***</td>
<td>.36***</td>
<td>.11</td>
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<tr>
<td>6. Ruminative exploration</td>
<td>2.97(.86)</td>
<td>-.50***</td>
<td>-.34***</td>
<td>.52***</td>
<td>-.18**</td>
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*p < .01, **p < .001.
Achievement was characterized by high scores on commitment making, identification with commitment, and reflective exploration in depth; low scores on ruminative exploration and reconsideration of commitment; and a moderate score on exploration in breadth. Foreclosure was characterized by moderate to high scores on commitment making and identification with commitment, moderate scores on reflective exploration in depth; and low scores on exploration in breadth, ruminative exploration, and reconsideration of commitment. Searching Moratorium was characterized by high scores on all the six dimensions. Carefree Diffusion was characterized by a moderate score on ruminative exploration and moderate to low scores on all other dimensions. The Troubled Diffusion cluster was characterized by low scores on commitment making and identification with commitment; moderate scores on exploration in breadth and reflective exploration in depth; and high scores on ruminative exploration and reconsideration of commitment. Finally, the Undifferentiated cluster was characterized by moderate scores on all the six dimensions.

A MANOVA was conducted with cluster membership as an independent variable and life satisfaction, trait anxiety, and depressive symptoms as dependent variables. Using Wilks’ Lambda, statistically significant multivariate cluster differences were found, $F(15, 748) = 3.35, p < .001, \eta^2 = .06$. Follow-up univariate $F$-values, $\eta^2$ values, and pair wise comparisons (using Tukey’s Honestly Significant Difference test) are shown in Table 5. Achievement was significantly higher on life satisfaction than Troubled Diffusion. Foreclosure was lower than Searching Moratorium and Troubled Diffusion on anxiety, and Troubled Diffusion was the highest on depressive symptoms. Interactions of age (defined as two groups from 17–20 to 21–29) and gender with identity statuses did not yield significant results, indicating that identity status differences in outcome variables were similar across age and gender.

**Discussion**

Some authors have argued that, to understand individuals’ personal identity formation, one must study the context in which individuals are embedded. These contextual features influence identity formation through shared values, ideologies, and norms that are socially constructed and communicated through signs, symbols, meanings, and expectations (Adams & Marshall, 1996). Contexts may also function as barriers to identity development, such as limiting exploration in breadth (Yoder, 2000). Prior research has indeed indicated some differences between Western and Eastern contexts in how identity processes are structured (Berman et al., 2011). The present study was designed to examine, for the first time, the structure and measurement of a process-oriented identity model (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008) in the context of post-Soviet Georgia.

The present findings indicated that the five-dimensional model proposed by Luyckx, Schwartz, et al. (2008), Luyckx, Soenens, et al. (2008) in Belgium did not fit the present Georgian data. However, a six-factor model, following the work of Zimmermann et al. (2013), provided an acceptable fit to our data. The six-dimension model instead of exploration in depth factor includes two factors which we define as “reflective exploration in depth” and “reconsideration of commitments”. In our Georgian sample, reflective exploration in depth was positively correlated with commitment making and identification with commitment, whereas reconsideration of commitment evidenced negative correlations with identification with commitment and positive correlations with exploration in breadth and ruminative exploration. This pattern of inter correlations is quite

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<td>Correlations among identity dimensions and external variables.</td>
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<td>Commitment making</td>
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<td>Exploration in breadth</td>
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<td>Reflective exploration in depth</td>
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<td>Reconsideration of commitment</td>
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<td>Ruminative exploration</td>
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* $p < .05$, ** $p < .01$, *** $p < .001$.  

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<th>Table 4</th>
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<td>Standardized path coefficients describing relationships between identity dimensions and outcome variables.</td>
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<tr>
<td>Age</td>
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* $p < .05$, ** $p < .01$, *** $p < .001$.  

$a$ 0 = male, 1 = female.
similar to the one reported by Zimmermann et al. (2013) in Switzerland and France. In addition, in our Georgian sample, these two dimensions were not significantly correlated with each other and evidence different patterns of relations with outcome measures. Specifically, reflective exploration in depth was negatively associated with depressive symptoms and positively to life satisfaction, whereas reconsideration of commitments was positively related to depressive symptoms and anxiety and negatively to life satisfaction. Reflective exploration in depth seems to imply thinking about commitments that are endorsed at the moment, whereas reconsideration of commitments focuses more on doubting existing commitments. Indeed, reconsideration, although sometimes necessary for revising one’s commitments when they are no longer satisfactory or functional, can be linked with concomitant symptoms of anxiety and depression (Schwartz, Klimstra, Luyckx, Hale, & Meeus, 2012).

In Marcia’s seminal work (1966) and in further elaborations of the identity status model (e.g., Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008), exploration in breadth is viewed as leading to advanced identity development. In studies conducted in the West, exploration in breadth correlates positively with commitment making and identification with commitment (Luyckx, Vansteenkiste, Duriez, & Goossens, 2009; Ritchie et al., 2013; Zimmermann et al., 2013). In Georgia, however, this does not appear to be the case. Additionally, in contrast to Western studies, exploration in breadth was strongly correlated with ruminative exploration.

Age appeared to significantly moderate the relation between ruminative exploration and anxiety, which is in line with previous findings indicating that the link between exploration and depressive symptoms increases with age (Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013). In terms of moderation by gender, identification with commitment was related to more favourable functioning in terms of life satisfaction and anxiety for men than for women. Ruminative exploration was associated with more depressive symptoms for women but not for men, and exploration in breadth was

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**Fig. 1.** Interactions of age and gender with identity dimensions predicting outcome variables.
positively linked with life satisfaction only for men. These findings might suggest that exploration in breadth and ruminative exploration, which are highly correlated, may be less adaptive for women than for men in Georgia. This picture fits well with the unbalanced gender roles in Georgia: unlike girls, boys are expected and encouraged to be more independent and active in building their careers so that they can become future breadwinners.

In terms of typological findings, the cluster analytic results did not indicate differences in status profiles between the present Georgian results and prior work conducted in Western contexts. However, our findings did suggest some distinctions between the Georgian context and the contexts in which the DIDS had been used previously. The Achieved cluster in the present sample seems to be most adaptive, considering its high scores on life satisfaction and low scores on depressive symptoms. The Achieved cluster, however, is different from the one observed in Belgian (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008) and American (Schwartz et al., 2011) samples. Specifically, the Achieved cluster in the present study was characterized by moderate, rather than high, scores on exploration in breadth. Considering that exploration in breadth appears to be less adaptive or feasible in the Georgian cultural context, it follows that achieved individuals do not (or are not able to) extensively explore multiple alternatives in developing a sense of identity. On the other hand, the Achieved cluster did score higher on exploration in breadth compared to the Foreclosed cluster. The Foreclosed cluster was characterized by similar patterns of identity dimensions as has been found in other studies. However, Foreclosed young adults in the present study showed similar level of adjustment as those in the Achievement cluster. In other studies, individuals in the Achieved status reported more favourable psychological adjustment than individuals in the Foreclosed status (Luyckx, Vansteenkiste, Duriez, & Goossens, 2009; Schwartz et al., 2011).

Unlike previous studies, the Carefree Diffused cluster evidenced a moderate level of ruminative exploration (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008; Schwartz et al., 2011). On adjustment variables, Carefree-Diffused individuals scored intermediate, suggesting a moderate level of adaptiveness for this status in the Georgian context. Carefree diffusion did not appear to be adaptive in other contexts, especially in the United States (Schwartz et al., 2011).

Table 5
Means (SD) in outcome variables for six identity clusters.

<table>
<thead>
<tr>
<th>Status Cluster</th>
<th>(n = 34, 12%)</th>
<th>(n = 39, 14%)</th>
<th>(n = 54, 19%)</th>
<th>(n = 53, 19%)</th>
<th>(n = 33, 12%)</th>
<th>(n = 66, 24%)</th>
<th>F-value</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction</td>
<td>4.74 (1.03)</td>
<td>4.46 (1.36)</td>
<td>4.28 (1.29)</td>
<td>3.76 (1.19)</td>
<td>4.00 (1.23)</td>
<td>4.29 (1.20)</td>
<td>3.42*** .06</td>
<td></td>
</tr>
<tr>
<td>Trait anxiety</td>
<td>2.29 (0.38)</td>
<td>2.28 (0.34)</td>
<td>2.49 (0.33)</td>
<td>2.50 (0.32)</td>
<td>2.34 (0.37)</td>
<td>2.33 (0.28)</td>
<td>4.12*** .07</td>
<td></td>
</tr>
<tr>
<td>Depression symptoms</td>
<td>0.37 (0.28)</td>
<td>0.45 (0.46)</td>
<td>0.50 (0.33)</td>
<td>0.70 (0.35)</td>
<td>0.59 (0.36)</td>
<td>0.46 (0.24)</td>
<td>5.80*** .09</td>
<td></td>
</tr>
</tbody>
</table>

Note. A cluster mean is significantly different from another mean if they have different superscripts. A mean without a superscript is not significantly different from any other mean.
The Troubled Diffusion cluster was relatively high in exploration in breadth compared to the corresponding cluster emerging from the Belgian results (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008). At the same time, in the present data this cluster was characterized by higher levels of internalizing symptoms. As such, Troubled-Diffused individuals appeared most vulnerable to identity distress and therefore might need some form of intervention. The Troubled Diffusion cluster shares some similarities with the Moratorium cluster presented in other studies (Crocetti, Rubini, Luyckx, & Meeus, 2008). Indeed, more than a decade ago, Côté and Schwartz (2002) noted the similarities between diffusion and moratorium in terms of impaired psychosocial adjustment.

The Searching Moratorium cluster appeared to be in line with Western European and American results — that is, these individuals were actively involved in identity work and reported elevated levels of anxiety. Their success in the task of developing an identity might depend on their ability to handle the anxiety stemming from exploration and to enact commitments based on their exploration. The Undifferentiated cluster might include individuals who are beginning the task of developing an identity might depend on their ability to handle the anxiety stemming from exploration and to enact commitments based on their exploration. The Undifferentiated cluster might include individuals who are beginning the task of development.

The optimal environment for identity exploration might be one that provides balance between structure (providing role models and guidance) and free space for experimentation with identity possibilities (Erikson, 1968). Based on the variable-level and person-level results, we suggest that exploration in breadth may not be consonant with some features of the Georgian cultural context. On one hand, collectivistic cultural patterns imply higher regard for the social group (e.g., family, community) than for one’s own needs and desires. As noted earlier, young Georgians often do not become independent from their parents, sometimes not even in early adulthood. Authoritarian parenting practices, which are highly valued in the Georgian cultural context, especially in the older generation, might have strong implications for developmental tasks such as identity formation; cultural norms expressed in sayings and proverbs explicitly require compliance with parental expectations during the decision-making process (Sumbadze, 2011; Surmanidze, 2002). The influence of social and familial norms, expectations, and standards for behaviour are quite strong. These cultural aspects might function as limits on one’s exploration of identity alternatives in breadth. On the other hand, the post-Soviet cultural transition, along with contradictory expectations between the younger and older generations regarding values and lifestyles, might also help to explain why exploration in breadth is closely associated with rumination.

Another contextual factor that might also function as a barrier to exploration is the low socioeconomic conditions which characterize many Georgian families. Indeed, such conditions influence career-related identity domains such as future plans (e.g., Phillips & Pittman, 2003; Yoder, 2000). Georgia is a country in socioeconomic and political transition with less than 25 years of independence. Job-market options providing substantive financial safety are quite limited. In many cases, young people do not have many choices in terms of their career paths, because financial needs and lack of jobs impose limitations on their aspirations (Sumbadze, 2011; Tsuladze, 2003, 2010). In these conditions, making commitments to available options may represent a more “safe” and adaptive strategy (as it will prevent a young person from financial hardships) than exploration, which potentially might promote better adjustment but poses risks for instability and uncertainty (Scholer & Higgins, 2012). An unstable socio-economic environment appears to influence identity exploration in other contexts as well. A study conducted in Italy (Crocetti et al., 2011) found that the Achieved young adults are characterized by moderate levels of ruminative exploration along with high exploration in breadth, unlike their Belgian and North American Achieved peers (Luyckx, Schwartz, et al., 2008; Luyckx, Soenens, et al., 2008; Luyckx et al., 2009; Schwartz et al., 2011). Crocetti et al. interpreted their results in terms of socio-contextual and economic constraints, as we do here with our Georgian sample.

To sum up, the findings for two of the three DIDS exploration subscales, and some aspects of the identity status solution differed from what we had hypothesized. In the case of exploration in breadth, the specificities of the Georgian context (e.g., value system, socioeconomic conditions) may have contributed to the fairly strong association of exploration in breadth with ruminative exploration and maladjustment. On the other hand, the unpacking of exploration in depth into two separate dimensions parallels findings obtained in other parts of Europe (i.e., Switzerland and France) — and this pattern may necessitate refinement of the DIDS factor structure and may partially bridge the models forwarded by Luyckx and colleagues and by Crocetti and colleagues. Specifically, the presence of a reconsideration of commitment dimension within both models represents a key point of convergence.

Implications for clinical practice

Interventions targeting identity may be focused on the environment and/or on the individual (Josselson, 1994). The results of our study suggest that exploration in breadth, a key process underlying personal identity formation, is associated with negative emotions (and especially ruminative exploration) in Georgia. Certain aspects of the Georgian context discussed above, such as limited career opportunities and highly structured cultural norms, might suggest that exploration in breadth is not the most adaptive mechanism for identity formation, and that Foreclosure might score more favourably than Achievement on adjustment outcomes. Indeed, exploration in breadth did not appear to be adaptive in the Georgian context, and the Achieved status was characterized by moderate instead of high scores on exploration in breadth (which may be explained in terms of contextual factors). However, the typological prediction was not supported: the Foreclosed and Achieved statuses scored equivalently (and most favourably) in terms of adjustment outcomes. It seems that certain groups of young Georgians still explore different identity alternatives and may experience a sense of self-direction and agency. Such an exercise of agency may contribute to some degree of favourable adjustment. On the other hand, making a commitment without exploration, especially in the context of limited opportunities, may also be an autonomous decision. The unstable socio-political and
socioeconomic context, along with cultural values that to some extent contraindicate exploration in breadth, might contribute to tension and anxiety for those individuals who do explore in breadth. Exploring in breadth within this context may be akin to “swimming upstream” and may require personal resources, such as internal locus of control, self-esteem and a sense of purpose in life — capacities that scholars have labelled as identity capital (Côté, 2005; Schwartz, Côté, & Arnett, 2005). Interventions with young Georgians experiencing identity distress might focus on enhancing identity capital.

Contextually speaking, given the prominence of nuclear family relationships in Georgia, interventions might target family relationships as the most immediate context. Although socio-economic conditions hindering physical separation from the parental home are connected to macro-level aspects, interventions might target micro-level contexts, specifically parenting approaches. Collectivistic cultures such as Georgia value interdependence, and close relationships between parents and children are integral to this interdependence. Research shows that parental autonomy support, rather than independence from parents, is necessary for optimal development in collectivistic cultures (Chen, Beyers, Vansteenkiste, Soenens, & Van Petegem, 2013). Autonomy, defined as volitional functioning taking place without pressure or control, does not contradict the value of interdependence (Kagitçibaşi, 2013; Van Petegem, Beyers, Vansteenkiste, & Soenens, 2012). Parenting approaches that constrain young people’s search for autonomy also interfere with adaptive identity formation processes (Luyckx et al., 2007). Interventions might focus on decreasing pressure applied by parents, and on promoting approaches facilitating children’s initiative and self-expression. Such interventions would foster high sensitivity to young adults’ needs and interests, thus creating conditions for agentic identity formation. Such agency can occur even within the context of a collectivist-oriented parent—child relationship (Pan, Gauvain, & Schwartz, 2013).

Limitations and suggestions for future research

The present results should be interpreted in light of some important limitations. First, the sample size used in the present study was quite small, and the lack of diversity on some socio-demographic variables (e.g., gender and marital status) did not allow us to examine these variables in connection with personal identity formation. Future research might include larger samples of young people in Georgia, as well as a greater representation of men. Second, the study did not include some contextual variables (e.g., parenting, cultural orientation, perception of job opportunities) that would have been important to examine. Third, the cross-sectional design we used does not allow us to draw developmental conclusions. It is important to replicate our results longitudinally.

Some directions for future research are also outlined. The DIDS factor solution includes six factors instead of the initially proposed five. This result has also emerged in other parts of Europe (Beyers & Luyckx, 2014; Zimmermann et al., 2013). To the extent to which the demarcation of reflective exploration in depth from reconsideration of commitments characterizes the DIDS in general, new items may need to be developed, especially for reflective exploration in depth (Beyers & Luyckx, 2014). Our study examined identity processes within the domain of future plans. Future research might focus on other domains of identity, such as romantic relationships, personal values, and profession, with possibly different results.

Notwithstanding these and other limitations, the present study has shed light on identity processes in post-Soviet Georgia and may suggest similar patterns in other post-Soviet countries. The role of exploration in breadth, in particular, may be less clear in societies with transitional socio-political and economic systems and where collectivism predominates over individualism. Our results may set the stage for further research that directly compares the structure of identity development across countries that vary in their endorsement of individualist and Western values. Such work will further help to place existing identity models into cultural context.

References


