J Youth Adolescence (2012) 41:732–748
DOI 10.1007/s10964-011-9702-2

EMPIRICAL RESEARCH

Correlates of Identity Configurations: Three Studies with Adolescent and Emerging Adult Cohorts

Elisabetta Crocetti · Marta Scrignaro · Luigia Simona Sica · Maria Elena Magrin

Received: 25 May 2011 / Accepted: 21 July 2011 / Published online: 2 August 2011

Abstract Adolescence and emerging adulthood are two core developmental periods in which individuals can develop a meaningful identity across domains. However, there is a lack of studies exploring correlates of different identity configurations. The purpose of this article was to fill this gap in examining correlates of configurations characterized by identity stability or instability in both ideological and relational domains or identity stability in one domain and instability in the other domain. Three studies were presented. In the first study, we investigated links between identity configurations and internalizing problem behaviors in early and middle adolescents ($N = 1{,}891$; $M_{age} = 14$; 55% female); in the second study, we focused on associations between identity configurations and identity functions in late adolescents and early emerging adults ($N = 1{,}085$; $M_{age} = 19$; 63% female); in the third study, we investigated relationships between identity configurations, sense of coherence, and basic psychological need satisfaction in emerging adults ($N = 489$; $M_{age} = 21$; 71% female). Overall, findings highlighted that participants experiencing a condition of identity stability in both domains reported a better profile than their peers displaying a condition of instability in both realms. Further, individuals with identity stability only in one domain reported intermediate scores and the effect provided by each domain varied according to the correlate examined and the age group taken into account. Implications of these findings are discussed.

Keywords Identity · Anxiety · Depression · Identity functions · Sense of coherence · Basic need

E. Crocetti (✉) · M. Scrignaro · M. E. Magrin
Department of Psychology, University of Milano-Bicocca, P.O. Box Piazza dell'Ateneo Nuovo, 1, 20146 Milan, Italy
e-mail: info@elisabettacrocetti.com

M. Scrignaro
e-mail: marta.scrignaro1@unimib.it

M. E. Magrin
e-mail: mariaelena.magrin@unimib.it

L. S. Sica
Department of Psychology, University of Turin, P.O. Box Via Verdi 10, 10124 Turin, Italy
e-mail: luigiasimona.sica@unito.it

Introduction

Identity formation is the most important task adolescents and emerging adults have to deal with (Arnett 2000, 2004; Erikson 1950, 1968). This task is particularly complex since individuals have to enact significant choices in multiple domains: while some of them can assume relevant commitments in both ideological (e.g., vocation, religion, politics) and interpersonal (e.g., relationships with friends and partners) domains most youth may endorse salient commitments in one identity domain but not in another one (Bosma and Jackson 1990). In fact, as documented by empirical studies (Dellas and Jernigan 1990; Goossens 2001; Fadjukoff et al. 2005; Pastorino et al. 1997), there is low congruence in identity statuses across domains.

Up to now, there is a dearth of studies uncovering correlates of different identity configurations, characterized by identity status congruencies across domains (i.e., identity stability or instability in multiple domains) and identity status incongruencies across domains (i.e., identity stability in one domain and instability in the other domain). Therefore, the purpose of this article is to gain insight on this issue, considering various correlates in different age groups. Specifically, three studies will be presented: in the

first study, we investigated links between identity configurations and internalizing problem behaviors in early and middle adolescence; in the second study, we focused on associations between identity configurations and identity functions in late adolescence and early emerging adulthood; in the third study, we investigated relationships between identity configurations, sense of coherence, and basic psychological need satisfaction in emerging adulthood. In this way, we could shed light for the first time on correlates of identity configurations in different age groups.

The Identity Status Paradigm

Most identity research has been conducted within the framework provided by the identity status paradigm (Marcia 1966). According to this paradigm, individuals can be classified in one out of four identity statuses on the basis of two variables: *exploration* (refers to the active questioning and weighing of various identity alternatives before making decisions about the values, beliefs, and goals that one will pursue) and *commitment* (involves making a relatively firm choice about an identity domain and engaging in significant activities geared toward the implementation of that choice). Specifically, in the *achievement* status, individuals have made a commitment in a specific identity domain following a period of active exploration; in the *foreclosure* status, adolescents have made a commitment with little or no prior exploration; in the *moratorium* status, adolescents are actively exploring various alternatives and have not yet made a commitment; finally, in the *diffusion* status adolescents have not engaged in a proactive process of exploration of different alternatives, nor have they made a commitment in a specific identity domain. Thus, the various identity statuses represent distinct ways of dealing with the identity task described by Erikson (1950).

Marcia's (1966) model has inspired a large amount of research. Consistent evidence from these studies has indicated that statuses could be clearly differentiated in terms of personality characteristics, psychosocial problems, and quality of interpersonal relationships (for a review, see Kroger and Marcia 2011). Overall, findings point out that high commitment statuses (i.e., achievement and foreclosure) are characterized by high levels of well-being, positive adjustment, and a condition of identity stability; on the contrary, low commitment statuses (i.e., diffusion and especially moratorium) are typified by a condition of identity distress and by high problem behaviors. Therefore, commitment appears to be the core dimension able to provide individuals with a sense of stability and security (Berzonsky 2003).

Even though there is a wide literature focused on specific correlates of identity statuses reached in various domains (e.g., Hardy et al. 2010; see also Adams 2010 for a review), there are few studies examining how many individuals are in the same identity status across domains and unraveling correlates of specific situations of congruencies and incongruences across domains. Up to now, available studies suggest that the levels of agreement among classifications in identity statuses done in multiple domains are generally really low. For instance, Goossens (2001) reported that only 6–15% of first-year university students were classified in the same identity status across three ideological domains. Similarly, Fadjukoff et al. (2005) found that the rate of individuals aged 27, 36, and 42 years, classified in the same identity status across five domains ranged from 3.5 to 9.5%. These percentages increased when the comparison was made considering high commitment (i.e., achievement and foreclosure) versus low commitment (i.e., moratorium and diffusion) statuses. Overall, these results posit the problem of studying what happens when youth have defined their identity only in one domain but not in another one. In the present set of studies we addressed this issue considering the recent extensions of Marcia's (1966) model.

Recent Extensions of the Identity Status Paradigm

In the last decade, various extensions of Marcia's identity status paradigm have been proposed (for a review see Meeus 2011). In particular, Luyckx et al. (2006, 2008a) and Meeus, Crocetti and collaborators (Crocetti et al. 2008b; Meeus et al. 2010) proposed dual cycle models of identity formation. These models are aimed at capturing the dynamic process by which identity is formed and revised over time.

Both models distinguish different identity processes (commitment making, identification with commitment, exploration in breadth, in-depth exploration, and ruminative exploration are taken into account in Luyckx et al.'s model; commitment, in-depth exploration, and reconsideration of commitment are examined in the Meeus et al.'s more parsimonious model). Further, both models conceptualize identity as a dual-cycle process that involves identity formation and identity evaluation and maintenance. Moreover, both models, moving from the combination of the various identity processes have been able not only to individuate identity statuses originally described by Marcia (1966) but also to differentiate further identity statuses. Specifically, Luyckx et al. (2008a) distinguished two forms of diffusion (i.e., diffused diffusion and carefree diffusion) and Meeus and collaborators differentiated two types of moratorium (i.e., classical moratorium and searching moratorium).

A main difference between the two models refers to the domains taken into account. In particular, Luyckx et al.'s integrative model has been used to evaluate identity related

to general future plans. In fact, the Dimensions of Identity Development Scale (DIDS; Luyckx et al. 2008a) developed specifically to measure the five processes taken into account in this model, measures a unique identity domain, which is based on extent to which individuals explore future-related goals and commit themselves to future plans. Contrariwise, Meeus et al.'s three factor model has been adopted to study how individuals deal with identity domains that are relevant for their present experience. In more specific terms, the Utrecht-Management of Identity Commitments Scale (U-MICS; Crocetti et al. 2008b, 2010a) has been designed by Meeus to measure multiple identity domains that can be grouped into ideological (e.g., educational identity) and relational domains.

Given this main difference and considering the purpose of our studies the three-factor model proposed by Meeus and colleagues represented the best choice. In fact, this model pays attention to identity formation in specific identity domains. Therefore, his model, described more in details below, provided a valuable framework for examining correlates of identity configurations characterized by identity status congruencies or incongruencies across multiple domains.

The Three-Factor Identity Model

The recent three-factor identity model proposed by Meeus, Crocetti and colleagues (Crocettiet al. 2008b; Meeus et al. 2010) represents an extension of Marcia's conceptualization and it is rooted in Meeus's previous work (see Meeus 1996; Meeus et al. 1999, 2002). This model takes into account three pivotal identity processes. *Commitment* refers to enduring choices that individuals have made with regard to various developmental domains and to the self-confidence they derive from these choices; it serves as an indicator of identity consolidation and of successful identity development. *In-depth exploration* represents the extent to which individuals think actively about the commitments they have enacted (e.g., reflecting on their choices, searching for additional information, talking with others about their commitments). It can be a double-edge sword, associated with curiosity but also with confusion and identity distress. *Reconsideration of commitment* refers to the comparison of present commitments with possible alternative commitments because the current ones are no longer satisfactory. Releasing one's commitments is intertwined with a condition of disequilibrium and distress. These three identity processes have been found to display a distinct profile in studies conducted in different European countries (Crocetti et al. 2008b; 2010a).

Crocetti et al. (2008a, 2011a) found, using commitment, in-depth exploration, and reconsideration of commitment, and by means of empirically-based clustering methods of deriving identity statuses, that it was possible to individuate five identity statuses (i.e., achievement, early closure, moratorium, searching moratorium, and diffusion). Specifically, the *achievement* status consists of adolescents who scored high on commitment and in-depth exploration but low on reconsideration of commitment. The *early closure* status includes individuals with moderately high scores on commitment and low scores on both in-depth exploration and reconsideration of commitment. The *moratorium* status consists of individuals who scored low on commitment, medium on in-depth exploration, and high on reconsideration of commitment. The *diffusion* status comprises individuals with low scores on commitment, in-depth exploration, and reconsideration of commitment. Finally, the *searching moratorium* status is represented by adolescents high on commitment, in-depth exploration, and reconsideration of commitment. The two moratorium statuses differ in terms of the base from which reconsideration is attempted: adolescents in the *moratorium* cluster have few commitments and are evaluating alternatives in order to find satisfying identity-related commitments; whereas, their peers in the *searching moratorium* group are seeking to revise commitments that have already been enacted, and they are able to do so from the base provided by their current commitments.

In line with results obtained using the identity status paradigm (cfr. Marcia 1993), adolescents in these five identity statuses were found to differ significantly in terms of psychosocial problems (Crocetti et al. 2008a, 2011a). In particular, adolescents in the achievement and early closure statuses were characterized by low levels of psychosocial problems; whereas adolescents in the searching moratorium and especially those in the moratorium status reported more internalizing and externalizing psychosocial problems. Finally, adolescents in the diffusion status displayed a poorly-defined personality profile and medium levels of psychosocial problems. Overall, these findings highlighted that, while the statuses characterized by moderate to high commitments associated with low levels of reconsideration of commitment (i.e., achievement and early closure) reveal conditions of identity stability, the statuses with low commitments and/or high reconsideration (i.e., moratorium, searching moratorium, and diffusion) represent conditions of identity instability.

Up to now, research conducted with this three-factor identity model has analyzed global identity, obtained by combining one ideological (i.e., educational) domain with one relational domain (e.g., Crocetti et al. 2008a; Klimstra et al. 2010). That means that the three-factor model has yet to be used to analyze specific combinations of identity statuses reached in multiple domains. Therefore, in the present set of studies, we considered educational and relational identity domains separately. In this way, we

could shed light on specific correlates of different identity configurations.

Aims of the Present Studies

The literature reviewed so far documents a pattern of meaningful relationships between identity processes (various forms of commitment and exploration), identity statuses (achievement, closure, moratorium, diffusion, and additional variations of these statuses) and various correlates (e.g., internalizing problem behaviors, personality dimensions). Nevertheless, what it is missing is an analysis of correlates of identity configurations characterized by conditions of identity stability and instability in multiple domains. In these studies, we uncovered this issue and in order to gain a better understanding of this phenomenon we took into account two identity domains (i.e., educational and relational) and, by means of a person centered-approach, we examined the profile of different identity configurations. Further, we analyzed this topic in two developmental phases (i.e., adolescence and emerging adulthood). For each phase we have taken into consideration correlates (i.e., internalizing problem behaviors, identity functions, sense of coherence, satisfaction of basic psychological need) salient for period under investigation. In this way, we could shed light for the first time on some correlates of various identity configurations.

First, in line with identity literature (cfr. Marcia et al. 1993), we considered two identity domains, one representative of the ideological realm and the other representative of the relational realm. In fact, these two identity areas represent the building blocks of personal identity (Meeus et al. 1999). Specifically, within the ideological domain, we focused on educational identity, that is the identity domain related to how people live their educational experience. For junior, high school, and college students, this is a core aspect of self-definition and a significant basis of future planning (e.g., Bosma 1985). Additionally, within the relational domain, we considered different aspects, modulated on the basis of the developmental period taken into account. As we discuss later, there are differences between adolescence and emerging adulthood that involve also the relevance of people belonging to the individual social network. In particular, throughout adolescence, the relationship with the best friend becomes of central importance (Sherif and Sherif 1964). The best friend represents a valid ally to face daily challenge of adolescence, to share positive and negative events, and to interpret what is going on in the external and internal word (e.g., De Goede et al. 2009; Helsen et al. 2000). Thus, to form a stable relational identity refereed to the relationship with the best friend is a key task for adolescents. While the best friend continues to be important in the transition from late adolescence to early emerging adulthood, his/her relevance decreases moving toward later emerging adulthood (Crocetti et al. 2007). In this period, it is not easy to individuate a key relational reference point. For most emerging adults, the most important person within the social network is represented by the romantic partner (Fincham and Cui 2010; Lanz and Tagliabue 2007). For those not involved in a romantic relationship, family members, in particular parents, represent a reference point. In fact, consistent evidence suggests that during emerging adulthood individuals renegotiate their parental relationships, so that the quality of communication and trust increases and the level of conflict decreases (Scabini et al. 2006). This relational change make parents valid allies to help face the transition to adulthood. Summing up, on the basis of these considerations, in the present set of studies we considered educational identity and relational identity, with the latter referring to the relationship with the best friend in adolescence and to the relationship with a reference point chosen by individuals in emerging adulthood.

Second, in order to examine correlates of different identity configurations characterized by stability or instability in educational and relational domains, we adopted a person-centered approach. This is an approach aimed at individuating constellations of characteristics similar within a group of youth and able to differentiate one group of individuals from another one (Bergman et al. 2003). In other terms, a person-centered approach makes possible a move from examinations of links among variables to analyses of patterns typical of a group of individuals that share some characteristics of interests (Goossens and Luyckx 2007; von Eye and Bogat 2006). Specifically, by means of a person-centered approach we investigated which identity statuses (achievement, early closure, moratorium, searching moratorium, and diffusion) individuals have reached in educational and relational domains. Then, we considered four groups: individuals with a stable identity in both domains (i.e., those who are in the statuses of achievement or early closure in both domains), youth with an unstable identity in both domains (i.e., those who are in the statuses of diffusion, moratorium, or searching moratorium in both domains), individuals with a stable identity only in the relational domain (i.e., those who are in the statuses of achievement or early closure in the relational domain and are in the statuses of diffusion, searching moratorium, or moratorium in the educational one), and young people with a stable identity only in the educational domain (i.e., those who are in the status of achievement or early closure in the educational domain and are in the statuses of diffusion, searching moratorium, or moratorium in the relational one). Differences among these four groups (controlling for gender) on various correlates were taken into account.

Third, we examined differences among identity configurations in specific adolescent and emerging adult cohorts. In line with recent psychological conceptualizations (Arnett 2000, 2004) we distinguished adolescent (the period between 10 and 18 years) and emerging adult (19–29 years) phases. In fact, each phase presents peculiarities that should be taken into considerations. With respect to identity, adolescence has been traditionally conceptualized as a period in which biological, cognitive, and social changes stimulate a relevant identity work (Erikson 1950, 1968). Socio-economic and cultural changes happened across the last decades in Western countries have stimulated the emergence of the period between the late teens and the late twenties as a distinct developmental phase (Arnett 2000). Identity formation has been recognized as core task also of the emerging adulthood period, during which individuals can explore a large array of alternatives before enacting enduring choices in vocational and relational domains (Arnett 2004; Luyckx et al. 2006). Recent attempts to further differentiate adolescent and emerging adult periods suggest the importance of studying correlates of different identity configurations in each phase. For this reason, we have conducted three studies: Study 1 involved early and middle adolescents; Study 2 comprised late adolescents and early emerging adults; and Study 3 included emerging adults. As discussed below, in each study, we focused on specific correlates (internalizing problem behaviors in Study 1; identity functions in Study 2; and sense of coherence and satisfaction of basic psychological needs in Study 3) relevant for the age period examined.

Study 1

In the first study, we examined whether different identity configurations (i.e., stability in both domains, stability only in the educational domain, stability only in the relational domain, instability in both domains) are associated with differences in internalizing problem behaviors (i.e., depressive and anxiety symptoms). These links were investigated in early and middle adolescence. It is particularly important to study the relationship between identity and internalizing problems in this period, since depressive and especially anxiety are among the most prevalent psychosocial problems among youth from the general population in Western societies (Ollendick et al. 2002). Therefore, understanding factors that might be related to an increased risk of internalizing problem behaviors is a priority in the researchers' agenda.

A growing corpus of evidence has highlighted the existence of a strong link between identity and internalizing problem behaviors, pointing out that high commitment statuses are associated with lower levels of anxiety and depressive symptoms than low commitment statuses (for a synthesis see Kroger and Marcia 2011). In particular, studies showed consistently that the moratorium status (high exploration and low commitment status) is associated with the highest levels of internalizing problem behaviors (cf. Meeus et al. 1999).

Hypotheses

On the basis of the relevant literature, we hypothesized that adolescents who have enacted relevant commitments in both the educational and relational (i.e., friendship; cf. Bosma 1985) domains would display lower levels of depressive and anxiety symptoms (i.e., school and social anxiety) than their counterparts with an unstable identity in both realms. We further expected that adolescents with a condition of identity stability only in one domain would report intermediate levels of internalizing problem behaviors. We focused on these two identity domains because extant literature indicates that, for early and middle adolescents, education and friendships are among the most important realms (cf. Bosma 1985).

Method

Participants and Procedure

Participants were 1,891 Italian adolescents (846 boys and 1,045 girls) aged 11–19 years (M_{age} = 14.5 years, SD = 2.4) attending various junior high and high schools in the east-central region of Italy. Two age groups were represented in the sample: an early adolescent group (aged 11–14 years) of 1,021 adolescents (M_{age} = 12.5 years, SD = 1) and a middle adolescent group (aged 15–19 years) of 870 adolescents (M_{age} = 16.8 years, SD = 1.2).

Prior to initiating the study, we obtained permission from the school principals to administer questionnaires during class time. Parents were provided with written information about the research and were asked for their consent for the adolescent to participate. After we received parental permission, students were informed about the study and asked whether they wished to participate. Interviewers then visited the schools and asked adolescents to fill out the questionnaire packet.

Measures

Identity

Identity commitment, in-depth exploration, and reconsideration of commitment were measured using the *Utrecht-Management of Identity Commitments Scale* (U-MICS;

Crocetti et al. 2008b; Italian validation by Crocetti et al. 2010a). The U-MICS consists of 26 items with a response scale ranging from 1 (*completely untrue*) to 5 (*completely true*). Thirteen items index the target processes in one ideological domain (education) and 13 items index the target processes in one interpersonal domain (friendship). Sample items include: "My education/best friend gives me certainty in life" (commitment; 5 items for each domain), "I think a lot about my education/best friend" (in-depth exploration; 5 items for each domain), and "I often think it would be better to try to find a different education/best friend" (reconsideration of commitment; 3 items for each domain). Cronbach's alphas were .78 and .80 for commitment, .62 and .63 for in-depth exploration, and .73 and .79 for reconsideration of commitment in the educational and relational domains, respectively.

Depressive Symptoms

The *Children's Depression Inventory* (CDI; Kovacs 1985; Italian version by Kovacs 1988) was used to measure depressive symptoms. The CDI consists of 27 items, each responded to on a three-point scale: 1 (*false*), 2 (*a bit true*), and 3 (*very true*). A sample item is: "I am sad all the time". Cronbach's alpha was .88.

Anxiety Symptoms

Two subscales from the *Screen for Child Anxiety Related Emotional Disorders* (SCARED; Birmaher et al. 1997; Italian validation by Crocetti et al. 2009) were used to assess school and social anxiety symptoms. Participants filled SCARED items using a three-point scale: 1 (*almost never*), 2 (*sometimes*), and 3 (*often*). Sample items are: "I worry about going to school" (school anxiety; 4 items; $\alpha = .65$) and "I feel nervous with people I don't know well" (social anxiety; 4 items; $\alpha = .72$).

Data Analysis Strategy

Data analyses proceeded in three steps. First, we performed cluster analysis to examine whether both in the educational and relational domains it was possible to extract identity statuses (i.e., achievement, early closure, moratorium, searching moratorium, and diffusion) documented in previous studies conducted with the three-factor identity model proposed by Meeus, Crocetti et al. (Crocetti et al. 2008, 2011a; Meeus et al. 2010). Cluster analyses were conducted using Gore's (2000) two-stage approach: initially, we conducted two hierarchical cluster analyses using Ward's method and squared Euclidian distances on the standardized scores of the educational and relational identity dimensions. In order to test whether the five identity statuses provided the best fit to the data, we compared cluster solutions with two, three, four, five, six, and seven clusters on the basis of three criteria: theoretical meaningfulness of each cluster, parsimony, and explanatory power (i.e., the cluster solution had to explain approximately 50% of the variance in each of the identity dimensions). Whether on the basis of these criteria the hypothesized five-cluster solution was found to be the most acceptable we proceeded with the analyses and, in the second step, the initial cluster centers were used as non-random starting points in an iterative *k*-means clustering procedure. In this way, identity statuses were extracted for both the educational and relational domains.

Second, participants were classified in four identity configurations: stability in both domains (i.e., adolescents who are in the statuses of achievement or early closure in both domains); stability only in the educational domain (i.e., adolescents who are in the statuses of achievement or early closure in the educational domain and are in the statuses of diffusion, searching moratorium, or moratorium in the relational one); stability only in the relational domain (i.e., adolescents who are in the statuses of achievement or early closure in the relational domain and are in the statuses of diffusion, searching moratorium, or moratorium in the educational one); instability in both domains (i.e., adolescents who are in the statuses of diffusion, moratorium, or searching moratorium in both domains). We conducted a Chi-Square Test to investigate whether the distribution of participants across these four identity configurations was affected by gender.

Third, we performed a Multivariate Analysis of Variance (MANOVA) on internalizing problem behaviors (depressive, school anxiety, and social anxiety symptoms) as dependent variables with the four identity configurations and gender as independent variables. In this way we examined if adolescents in various identity configurations reported meaningful differences on problem behaviors and whether these differences were moderated by their gender. We used the Tukey's Honestly Significant Difference (HSD) post hoc analyses to further detect differences among identity configurations.

Results

Results of cluster analyses showed that both in the educational and relational domains a five-cluster solution could be selected. Indeed, solutions with fewer numbers of clusters failed to extract theoretically meaningful identity statuses and explained low variance (falling under the threshold of 50% of variance explained in each identity dimension); whereas solutions with a higher number of clusters violated the principle of parsimony, because they included clusters that represented only slight variations of

previous clusters and did not extract any new cluster that could be matched to a specific identity status as Crocetti et al. 2008a). The five-cluster solution explained between 51 and 59% of the variance in educational identity processes and between 55 and 64% of the variance in relational identity processes. In both domains the five extracted clusters corresponded to achievement, early closure, moratorium, searching moratorium, and diffusion identity statuses.

When we looked for identity configurations (see Table 1), we found that most participants (39.6%) had formed a stable identity only in the relational domain and another large group (34.8%) exhibited a condition of identity instability in both domains. The Chi-Square Test revealed significant gender differences in the distribution of participants across the four identity configurations (χ^2 (4, $N = 1{,}891$) = 24.89, $p < .001$, Cramér's $V = .11$, $p < .001$). A comparison of expected and observed values indicated that boys were overrepresented in the identity instability in both domains group and underrepresented in the identity stability only in the relational domain configuration, whereas the opposite pattern was found for girls. Further analyses pointed out that the same pattern of findings was replicated in both early and middle adolescent cohorts.

Results of the MANOVA showed that the combined dependent variables were significantly affected by identity configurations, Wilks' $\lambda = .95$, F (9, 4,559) = 11.19, $p < .001$, $\eta^2 = .02$. This main effect was not moderated by identity configurations X gender interaction. Findings of follow-up univariate analyses indicated that all of the dependent variables differed significantly across identity configurations (see Table 2). Specifically, findings about depressive symptoms revealed that adolescents with a stable identity in both domains scored the lowest, those with an unstable identity in both domains scored the highest, and those with a stable identity only in one domain reported intermediate scores. In particular, adolescents with a stable identity only in the relational domain scored higher than their peers with a stable identity in both domains and lower than their counterparts with an unstable identity in both realms, while adolescents with a stable identity only in the educational domain reported scores significantly different only from those of their peers with an unstable identity in both domains. Moving to anxiety symptoms, adolescents with a stable identity in both domains as well as their peers with a stable identity only in the educational domain scored lower on school anxiety than their counterparts with a stable identity only in the relational domain and those with an unstable identity in both domains. Additionally, adolescents with a stable identity in both domains scored lower on social anxiety than their peers in any other identity configuration.

Study 2

In the second study, we investigated whether different identity configuration (i.e., stability in both domains, stability only in the educational domain, stability only in the relational domain, and instability in both domains) are associated with differences in identity functions (i.e., structure, harmony, goals, future, control). Drawing upon the Eriksonian notion that identity fulfills a self-regulatory function, Adams and Marshall (1996) proposed that a well-defined identity functions to direct attention, filter or

Table 1 Distribution of participants across the four identity configurations by gender (data are expressed in percentages)

	Identity stability in both domains	Identity stability only in the educational domain	Identity stability only in the relational domain	Identity instability in both domains	Total
Study I ($N = 1{,}891$ adolescents aged 11–19)					
Boys	13.8	11.6	**35.1 (−)**	**39.5 (+)**	100
Girls	17.1	8.6	**43.3 (+)**	**31 (−)**	100
Total	15.7	9.9	39.6	34.8	100
Study II ($N = 1{,}085$ late adolescents and early emerging adults aged 18–22)					
Boys	21.4	19.5	20.9	38.2	100
Girls	27.6	15.8	21.2	35.4	100
Total	25.3	17.1	21.1	36.4	100
Study III ($N = 489$ emerging adults aged 19–29)					
Boys	21.1	**26.1 (+)**	34.5	18.3	100
Girls	30.8	12.7	37.2	19.3	100
Total	28	16.6	36.4	19	100

Observed values indicated in bold are significantly different from expected values: (+) indicates that the observed value is higher than the expected value; (−) indicates that the observed value is lower than the expected value

Table 2 Differences among identity configurations (reported data are mean scores and, in parentheses, standard deviations)

	Identity stability in both domains	Identity stability only in the educational domain	Identity stability only in the relational domain	Identity instability in both domains	
Study I (N = 1,891 adolescents aged 11–19)					
Internalizing problem behaviors					
Depressive symptoms	1.30[a] (0.24)	1.34[ab] (0.29)	1.37[b] (0.27)	1.43[c] (0.30)	F (3, 1,890) = 16.12, $p < 001$; $\eta^2 = .03$
School anxiety	1.45[a] (0.42)	1.52[a] (0.48)	1.67[b] (0.49)	1.72[b] (0.50)	F (3, 1,890) = 24.27, $p < 001$; $\eta^2 = .04$
Social anxiety	1.61[a] (0.40)	1.73[b] (0.46)	1.71[b] (0.45)	1.77[b] (0.45)	F (3, 1,890) = 8.80, $p < 001$; $\eta^2 = .01$
Study II (N = 1,085 late adolescents and early emerging adults aged 18–22)					
Identity functions					
Structure	3.73[c] (0.65)	3.59[bc] (0.69)	3.48[ab] (0.64)	3.40[a] (0.75)	F (3, 1,084) = 8.32, $p < 001$; $\eta^2 = .02$
Harmony	4.06[c] (0.53)	3.87[b] (0.75)	3.78[b] (0.65)	3.53[a] (0.73)	F (3, 1,084) = 22.86, $p < 001$; $\eta^2 = .06$
Goals	4.04[c] (0.64)	3.87[b] (0.66)	3.75[b] (0.72)	3.58[a] (0.75)	F (3, 1,084) = 20.22, $p < 001$; $\eta^2 = .05$
Future	3.61[b] (0.74)	3.52[b] (0.76)	3.18[a] (0.84)	3.18[a] (0.85)	F (3, 1,084) = 13.60, $p < 001$; $\eta^2 = .04$
Control	3.87[c] (0.56)	3.70[b] (0.58)	3.70[b] (0.67)	3.45[a] (0.75)	F (3, 1,084) = 15.01, $p < 001$; $\eta^2 = .04$
Study III (N = 489 emerging adults aged 19–29)					
Sense of coherence	4.30[ab] (0.74)	4.16[ab] (0.77)	4.37[b] (0.74)	4.08[a] (0.72)	F (3, 488) = 3.66, $p < 05$; $\eta^2 = .02$
Basic need satisfaction					
Autonomy	3.09[a] (0.44)	2.95[a] (0.47)	3.05[a] (0.45)	2.97[a] (0.46)	F (3, 488) = 1.54, *ns*; $\eta^2 = .01$
Competence	3.06[b] (0.40)	2.90[a] (0.50)	3.04[ab] (0.46)	2.96[ab] (0.49)	F (3, 488) = 4.10, $p < 01$; $\eta^2 = .02$
Relatedness	3.33[c] (0.45)	3.06[a] (0.46)	3.28[bc] (0.46)	3.14[ab] (0.46)	F (3, 488) = 7.31, $p < 001$; $\eta^2 = .04$

Means significantly ($p < .05$) differ at Tukey test if they have different superscripts

process information, manage impressions, and select appropriate behaviours. In other words, identity provides individuals with a sense of *structure* with which to understand self-relevant information. Second, identity provides a sense of consistency, coherence, and *harmony* between and among one's chosen values, beliefs, and commitments. Third, identity provides individuals with a *future* orientation and with a sense of continuity among past, present, and future. Fourth, identity offers *goals* and direction through commitments and values chosen by individuals. Finally, identity provides a sense of *personal control*, or agency that enables active self-regulation in the process of setting and achieving goals, moving toward future plans, and processing experiences in ways that are self-relevant (Serafini and Adams 2002).

In this study, we examined links between identity configurations and identity functions in late adolescents and early emerging adults (18–22 years). It is particularly important to investigate this topic in this specific age period that is characterized by a significant identity work aimed at finding meaningful goals and future plans (Luyckx et al. 2006). More specifically, late adolescence and early emerging adulthood are the seasons of life in which individuals are involved in anticipating and planning for the future (Arnett 2004; Luyckx et al. 2010) and face many external expectations in this direction. In this period, late adolescents and early emerging adults are called to actively identify their own developmental trajectory and define their identity, in terms of more stable commitments (relational, educational, and vocational; Aleni Sestito et al. 2010) that provide meaning and direction to their lives (Serafini 2008). Previous research indicated, in line with Erikson's (1968) and Adams and Marshall's (1996) conceptualizations, that individuals in the achievement status and, to a

similar extent, those in early closure group, reported higher levels of identity functions than their peers in the searching moratorium, moratorium, and especially in the diffusion status (Crocetti et al. 2011b).

Hypotheses

On the basis of the available literature, we hypothesized that late adolescents and early emerging adults who have enacted relevant commitments in both the educational and relational domains would display a higher levels of all five functions of identity than their counterparts with an unstable identity in both domains. Additionally, we expected that individuals who have formed a stable identity only in one domain would report intermediate scores on identity functions, benefiting from having enacted at least a commitment in one relevant area.

Method

Participants and Procedure

Participants were 1,085 youth from the Centre and the South of Italy (401 males and 684 females), aged from 18 to 22 years (M_{age} = 19.43 years, SD = 1.17). Two age groups were represented in the sample: a late adolescent group consisting of 348 students (132 males and 216 females) attending the last year of various secondary schools (M_{age} = 18.35 years, SD = 0.58) and an emerging adult sample including 737 university students (269 males and 468 females) attending their first (n = 396) or second (n = 341) year of university (M_{age} = 20.01 years, SD = 0.93).

Before beginning the study, we contacted the principals of the high schools and the deans of the university faculties to obtain permission to administer questionnaires. Then, students were contacted in high schools or in university buildings by a researcher. They were provided written information about the research and asked whether they wished to participate.

Measures

Identity

As in Study 1, the U-MICS was used to assess identity in one ideological (education) and in one interpersonal (friendship) domain. In the present study, Cronbach's alphas were .77 and .84 for commitment, .60 and .63 for in-depth exploration, and .75 and .82 for reconsideration of commitment in the educational and relational domains, respectively.

Identity Functions

We employed the Italian version (Crocetti et al. 2010b) of the 15-item *Functions of Identity Scale* (FIS; Serafini et al. 2006). Respondents were asked to indicate on a 5-point Likert scale ranging from 1 (*completely untrue*) to 5 (*completely true*) how well each of the FIS statements described them. Sample items are: "I am certain that I know myself" (structure); "My values and beliefs reflect who I am" (harmony); "I have constructed my own personal goals for myself" (goals); "I have a good idea of what my future holds for me" (future); "When what I'm doing isn't working, I am able to find different approaches to meeting my goal(s)" (personal control). As reported in Crocetti et al. (2010b), confirmatory factor analyses indicated that the five-factor structure of the FIS fit the data well, both in males and females and in late adolescent and emerging adult age groups. In this sample, Cronbach's alphas were .53 for structure, .62 for harmony, .60 for goals, .66 for future, and .50 for personal control. The low Cronbach's alphas may be due to the fact that only three items are used to assess each identity function (Springer et al. 2002). Applying the Spearman-Brown prophecy formula (Allen and Yen 1979; Brown 1910; Spearman 1910), which predicts what the reliability of the identity functions subscales would have been if they consisted of more items, it emerged that by adding three additional items (i.e., 1 for structure and 2 for personal control) to the current 15-item version of the FIS, all five subscales would be associated with acceptable Cronbach's alpha values.

Results

The same data analysis strategy used in Study 1 was adopted in Study 2. Results of the current study showed that, by means of cluster analyses, it was possible to extract both in the educational and relational domains identity statuses corresponding to achievement, early closure, moratorium, searching moratorium, and diffusion. The five-cluster solution explained between 58 and 63% of the variance in educational identity processes and between 55 and 68% of the variance in relational identity processes.

When we looked for identity configurations (see Table 1) we found that most participants (36.46%) exhibited identity instability in both domains, 25.3% of participants had formed a stable identity in both domains, 21.1% had formed a stable identity only in the relational domain and a 17.1% showed a condition of identity stability only in the educational domain. The Chi-Square Test revealed not significant gender differences in the distribution of participants across the four identity configurations (χ^2 (3, N = 1,085) = 6.33, p = .10), neither within the adolescent nor within the emerging adult cohorts.

Results of the MANOVA showed that the combined dependent variables were significantly affected by identity configurations, Wilks' $\lambda = .90$, F (15, 2,941) = 7.33, $p < .001$, $\eta^2 = .03$. This main effect was not moderated by identity configurations X gender interaction. Findings of follow-up univariate analyses indicated that all the dependent variables differed significantly across identity configurations (see Table 2). Specifically, findings about all functions of identity, except for future, revealed that adolescents and emerging adults with a stable identity in both domains scored the highest, those with an unstable identity in both domains scored the lowest, and those with a stable identity only in one domain reported intermediate scores. Moving to future, adolescents and emerging adults with a stable identity in both domains and those with a stable identity only in the educational domain scored higher than their counterparts with a stability only in the relational domain and those with identity instability in both domains.

Study 3

In the third study, moving from a salutogenic point of view (Antonovsky 1979), we examined whether different identity configurations are associated with differences in sense of coherence and in basic psychological need satisfaction. These links were investigated in emerging adulthood. It is particularly important to study the relationship between identity, sense of coherence, and basic need satisfaction in this period, since achieving such a sense of identity is a crucial developmental task of emerging adulthood (Arnett 2004) and it is intertwined with resilience resources and psychological processes, such as sense of coherence (Luyckx et al. 2008b) and basic need satisfaction (Luyckx et al. 2009).

Sense of coherence is a core feature of the generalized resistance resources (i. e., any coping resource that is effective in buffering a range of psychosocial stressors) and refers to the extent to which one views the world (i.e. both the internal and the external environment) as comprehensible, manageable, and meaningful (Antonovsky 1987). This is a resilience resource that promotes health and well-being (for a review see Eriksson and Lindström 2006), in fact individuals with high sense of coherence are less likely to perceive many situations as ego threatening and anxiety arousing and are more capable of confronting daily problems by using adaptive and flexible coping strategies. Antonovsky (1987) suggested that individuals have developed a generalized way of looking at the world as more or less coherent by late adolescence. Therefore, emerging adulthood is a chartered period of life to understand the correlation of this crucial resource with different identity configuration.

Although empirical research addressing the link between identity formation and sense of coherence is scarce, recently Luyckx et al. (2008b) demonstrated that sense of coherence was positively related to commitment making and identification with commitment, and negatively to a dysfunctional form of exploration, that is ruminative exploration, suggesting that sense of coherence might indeed constitute a resource of dealing with identity-related issues. Further, sense of coherence is negatively related to decision-making confusion and to commitment anxiety (Lustig and Strauser 2002) as well as positively related to flexible commitment making in emerging adults.

As sense of coherence, even the satisfaction of basic psychological needs, seems to be fruitful for a deeper understanding of the psychological processes related to the identity developmental task. Consistent with the self-determination theory (Deci and Ryan 2000), individuals continuously strive to satisfy the basic psychological need of autonomy (i.e., an individual's need to experience choice in the initiation, maintenance, and regulation of behaviour), competence (i.e., an individual's need to succeed at optimally challenging tasks and to be able to attain desired outcomes), and relatedness (i.e., an individual's need to establish a sense of mutual respect and connectedness with important others). Need satisfaction represents a key factor that will facilitate the development of a well-integrated identity, whereas need thwarting will impede identity development or even give rise to identity diffusion. Further the satisfaction of basic need was associated with identity—intrinsic relevant goals (Soenens and Vansteenkiste 2011) and with well-being and self realization trans-culturally (e.g., Deci et al. 2001; Vansteenkiste et al. 2005). Therefore, a deeper understanding of the relationship between basic psychological need satisfaction and identity development in emerging adulthood could become a relevant issue in the researcher's agenda. With this respect, recently, Luyckx et al. (2009) found, in their cross-sectional and longitudinal studies on two samples of high school and college students, that achievement of a stable identity was interrelated with need satisfaction, whereas identity instability was related to low need satisfaction.

Hypotheses

On the basis of the reviewed literature, we hypothesized that emerging adults who have enacted relevant commitments in both the educational and relational domains would display higher levels of sense of coherence and satisfaction of three psychological needs than their counterparts with an unstable identity in both domains.

Method

Participants and Procedure

Participants were 489 university students from the North of Italy (142 males and 347 females), aged from 19 to 29 years ($M_{age} = 21.02$ years, $SD = 2.18$). Students attending different years of bachelor or master courses were contacted in university buildings by a researcher. They were provided information about the research and asked whether they wished to participate.

Measures

Identity

As in Study 1 and 2, the U-MICS was used to assess identity in one ideological (education) and in one relational domain. In the present study, participants could choose to which person to think about filling items about relational identity. In the present study Cronbach's alphas were .77 and .84 for commitment, .60 and .63 for in-depth exploration, and .75 and .82 for reconsideration of commitment in the educational and relational domains, respectively.

Sense of Coherence

The Italian version (Barni and Tagliabue 2005) of the *Sense of Coherence Scale* (SOC; Antonovsky 1993) was used. This consists of 13 items. A sample item is: "Do you have the feeling that you don't really care about what goes on around you?" (reverse scored). All items were answered on a 7-point Likert scale, in which the anchors for the response scale change to match the content of each question. For instance, for the sample item we reported, the response scale ranged from 1 (*very seldom or never*) to 7 (*very often*). Cronbach's alpha was .74.

Need Satisfaction

Need satisfaction was measured using the questionnaire developed by Sheldon et al. (2001). It consists of 9 items (3 items for each need) with a response scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). Sample items are "I feel that my choices are based on my true interests and values" (autonomy; $\alpha = .60$), "I feel that I can successfully complete difficult tasks and projects" (competence; $\alpha = .76$), and "I feel close and connected with other people who are important to me" (relatedness; $\alpha = .66$).

Results

We followed the same data analysis strategy followed in Study 1 and 2. The five-cluster solution explained between 50 and 56% of the variance in educational identity processes and between 51 and 64% of the variance in relational identity processes.

As can be seen in Table 1, in the current study 36.4% of the participants had formed a stable identity only in the relational domain, 28% reported a condition of identity stability in both domains, 16.6% had formed a stable identity only in the educational domain, and 19% exhibited a condition of identity instability in both domains. The Chi-Square Test revealed significant gender differences in the distribution of participants across the four identity configurations (χ^2 (3, $N = 489$) = 14.52, $p < .01$, Cramér's $V = .17$, $p < .01$). A comparison of expected and observed values indicated that boys were overrepresented in the identity stability only in the educational domain group.

Results of the MANOVA showed that the combined dependent variables were significantly affected by identity configurations, Wilks' $\lambda = .92$, F (12, 1,265) = 2.96, $p < .001$, $\eta^2 = .02$. This main effect was not moderated by identity configurations X gender interaction. Findings of follow-up univariate analyses indicated that all of the dependent variables, except for need for autonomy, differed significantly across identity configurations (see Table 2).

Findings about sense of coherence revealed that emerging adults with a stable identity in the relational domain scored higher than their peers with an unstable identity in both domains, while youth with a stable identity in both domains or only in the educational domain reported levels of sense of coherence not significantly different from those of their peers in the other identity configurations. Moving to basic psychological need, findings revealed that emerging adults with a stable identity in both domains scored higher in the satisfaction of basic need of competence than their peers with a stable identity only in the educational domain. With regard to satisfaction of the relatedness need, emerging adults with a stable identity in both domains scored higher than their peers with an unstable identity in both domains and with a stable identity only in the educational domain, while they reported scores similar to those of their counterparts with a stable identity only in the relational domain.

General Discussion

What does happen when individuals develop a stable identity in one domain but not in another one? In this article, we have shed light for the first time on correlates of various identity configurations characterized by stability or

instability in two identity domains (educational and relational). In order to gain a better understanding of this topic, we have adopted a person-centered approach, we have examined specific developmental phases, taking into account correlates relevant for each period. Thus, we have conducted three person-centered studies, each of them focused on one age period (i.e., adolescence in Study 1, late adolescence and early emerging adulthood in Study 2, and emerging adulthood in Study 3) and on specific correlates (i.e., internalizing problem behaviors in Study 1, identity functions in Study 2, sense of coherence and basic need satisfaction in Study 3). We now discuss main findings and suggest future lines of research.

Identity Configurations in Different Age Groups

Considering identity configurations found as more prevalent in different age groups, we can observe that the number of individuals in a condition of identity stability in both domains was higher in the older cohorts (it was 15.7% in the adolescent sample, 25.3% in the late adolescent and early emerging adult group, and 28% in the emerging adult group). Complementary to these findings are those showing that the rate of individuals reporting a condition of identity instability in both domains decreases (it was 34.8% in the adolescent group, 36.4% in the late adolescent and early emerging adult group, and 19% in the emerging adult group). Taken together, this evidence suggests that when navigating from adolescence toward the transition to adulthood a higher number of individuals become capable of dealing with multiple identity issues and finding relevant commitments that provide a reference guide for their behaviors (Erikson 1968). However, and in line with a wide corpus of evidence (for a meta-analysis, see Kroger et al. 2010), most individuals from the various cohorts have still to find out which aspects deserve their commitments.

Furthermore, findings revealed that when individuals consider only one identity issue, most of the time they enact steady commitments in the relational realm but not in the educational one. This pattern of differences, found to be consistent in all the three age groups, was particularly pronounced in adolescence and emerging adulthood and less marked in late adolescence and early emerging adulthood. This was probably due to the fact that during the transition from adolescence to emerging adulthood university students assign higher priority to finding an educational path that might fulfill their aspirations and future plans (cf. Montgomery and Côté 2003).

Identity Configurations: Gender Differences

In these set of studies we have discovered that gender differences across identity configurations were mainly found in the early and middle adolescent cohorts. In this age group, boys were overrepresented in the identity instability in both domains group and underrepresented in the identity stability only in the relational domain configuration, whereas the opposite pattern was found for girls. These differences were not evident in the cohort navigating from late adolescence to emerging adulthood and in the older group. In this latter emerging adult cohort, a single gender difference was detected, indicating that boys were overrepresented in the configuration characterized by identity stability only in the educational domain.

Taken together, these cross-sectional findings support longitudinal evidence documenting that girls are more mature with regard to identity formation in early adolescence, but boys have caught up with them by late adolescence (Klimstra et al. 2010). These gender differences in timing of identity formation might be caused by similar gender differences in biological maturation, as girls are typically ahead on boys in pubertal timing (cf. Alsaker and Flammer 2006). In fact, pubertal modifications, together with cognitive development and social transitions, stimulate identity work aimed at finding a new sense of continuity after all the changes that regard various personal spheres (Erikson 1968).

Correlates of Identity Configurations

In these set of studies, we have uncovered some correlates of different identity configurations. Overall, findings point out that individuals who have reached a condition of identity stability in both educational and relational domains report a better psychological functioning (i.e., lower depressive and anxiety symptoms; higher structure, harmony, goals, future orientation, and personal control over their lives; and higher satisfaction of basic need of relatedness) than their peers who exhibit a condition of instability in both domains. Additionally, those who have enacted relevant commitments only in one domain but not in the other report an intermediate profile. These results are in line with our expectations and with the identity literature suggesting that, when more identity commitments have been chosen, individuals can rely more on a meaningful reference that guides their behavior and provides a framework to interpret the internal and external reality (Berzonsky 2003; Erikson 1968; Marcia 1966; Meeus et al. 1999).

Within this general pattern of results, there are some specific findings that deserve our attention. In particular, in the younger age group (i.e., adolescents aged 11–19 years), we found that school anxiety was lower in individuals who enacted a firm commitment in educational identity, regardless of whether they have done the same for relational identity. This result suggests a specificity matching between school anxiety and educational identity.

A different picture emerged for social anxiety, in which adolescents with a stable identity in both domains reported lower scores than their counterparts in any other identity configuration. This suggests that having formed a stable identity only in the relational domain may not be enough to reduce levels of social anxiety. Various explanations of this result can be advanced. First, in this study relational identity was evaluated considering the relationship with the best friend. This relationship is of central importance for adolescents, but the type of connection established within the dyadic relationship with the best friend does not necessarily correspond to the quality of the relationship established with the larger peer groups adolescents interact with (Brown 2004). Further, the adolescent social network is complex (Furman and Buhrmester 1992) and involves relationships with same aged adolescents and several adults, within (e.g., parents, relatives, etc.) and outside the family (e.g., teachers, educators, etc.). This implies that having enacted a stable identity in the relationship with the best friend does not necessarily means that the individual feels confident in interactions with other people. These considerations suggest the importance of further studies focused on links between relational identity achieved in multiple relational domains and social anxiety.

Findings of Study 2 pointed out that, in late adolescence and early emerging adulthood, individuals with a stable identity in both domains reported the highest levels of structure, harmony, goals, future orientation, and personal control. Yet, their peers with an unstable identity in both domains scored the lowest on all identity functions. Additionally, individuals with a stable identity only in one domain reported intermediate scores. These results are in line with Adams and Marshall's (1996) conceptualization, that is focused on the positive outcomes provided by a sense of identity certainty reached in relevant domains.

Results of Study 3 highlighted the crucial role played by the stability in the relational identity domain in emerging adulthood. Both sense of coherence and satisfaction of basic psychological need of competence and relatedness are connected to a stable identity in the relational domain. These results are in line with the assumptions of both the salutogenic perspective (Antonovsky 1979) and self-determination theory (Deci and Ryan 2000), which posit that individuals who have close and supportive emotional ties with their parents and/or friends are more likely to perceived the world as coherent than individuals whose family and relational settings are less emotionally close and more controlled. These findings suggest that in this developmental period identity stability in the relational domain is related to a positive mental health (a state of well-being in which the individual realizes his or her own abilities and can cope with the normal stresses of life; WHO 2001) (cf. also, Lanz and Tagliabue 2007).

Taken together, results of the three studies presented in this article point out the importance of studying different identity configurations in specific developmental periods, paying attention to the characteristics peculiar to each phase. These findings should be interpreted considering also the peculiarities of the context of the research (cf. Beyers and Çok 2008), given the influences of the macro-system on the phenomenon under investigation (Bronfenbrenner 1979). The three studies were conducted in Italy, a country in which consistent and increased delays in the transition to adulthood make more and more urgent the need to study identity dynamics in adolescence and in emerging adulthood. In particular, as various sociologists (e.g., Buzzi et al. 2007) and demographers (e.g., Livi Bacci 2008) have stated on the basis of the results of large national surveys and comparisons of the Italian situation to that of other European countries, in Italy identity issues related to educational paths and relational issues are very relevant for young people.

In particular, concerning educational identity, Italy makes mandatory junior high school and high school is compulsory until students are 16-years-old. However, most adolescents continue their education until they receive a diploma when they are 18/19-years-old. After that, according to the Italian Minister of Education, 65.7% of adolescents go to college, while the remaining do not attend college and/or try to enter directly in the labor market. The "average Italian university student" needs 5 years to complete a three-year bachelor and 3 years to complete a two-year master. This means that for the average university student 8 years are necessary to complete university courses that would take 5 years, while the percentage of subjects who graduates in time is very low (18.1%). As a consequence, even though there are students that graduate on time, attending university until the age of 27 is considered normal (Livi Bacci 2008). Therefore, in Italy educational identity is a crucial identity domain across adolescence and emerging adulthood.

If we shift to the relational identity domain, we can see that also this domain is of utmost importance for Italian youth. In fact, in Italy, the mean age at which young people leave home to live independently is 29.5 for females and 31 for males (EU youth report 2009). These ages, among the highest of Europe, suggest than most young people, throughout adolescence and emerging adulthood, have the possibility to continue exploring and reconsidering their relational identity commitments before assuming adult roles.

Limitations and Suggestions for Future Research

This article should be considered in light of some limitations. First, we adopted a cross-sectional design, which does not allow us to test developmental trajectories, nor

causal links. Thus, we cannot ascertain times, antecedents, and consequences of transition from one identity configuration to another one. Therefore, future longitudinal studies are needed to map identity paths over time, from early adolescence to transition to adulthood.

Second, we relied only on self-report quantitative data. It would be worthwhile to integrate them with qualitative data (cf. Watzlawick and Born 2007). In this way, it could be possible to capture experiences and feelings of adolescents and emerging adults characterized by different identity configurations in order to gain a better understanding of their perceptions of the identity condition they are living.

Third, we considered identity configurations based on two identity domains. We focused on educational and relational domains since they are the most important realms for most adolescents and emerging adults. Nevertheless, it would be interesting to take into account additional domains, like political and religious domains, that, even though considered less important by young people [see for instance Jahromi et al. (2012) for data about youth and politics and King and Roeser (2009) for a discussion about youth and religion], still represent relevant pieces of the identity mosaic.

Fourth, in our studies we found that effect sizes of differences among identity configurations on various correlates were generally small. This probably has to do with the fact that variance within each correlate was low, especially for depressive and anxiety symptoms and basic need satisfaction. Therefore, future studies should uncover correlates of various identity configurations considering a larger array of variables, such as personality dimensions and social-cognitive processes. In particular, it would be worthwhile to study relationships between different identity configurations and perceptions of self-unity (e.g., Proulx and Chandler 2009) and self-continuity (e.g., Dunkel 2005).

Finally, in each study we have relied on samples that exclusively included students. While in adolescence this is a reasonable choice since school attendance is a normative experience for most adolescents, this is not the case during emerging adulthood. As discussed earlier, in Italy, after completing of high school, 65.7% of adolescents go to college, while the remaining 34.3% do not attend college and try to enter directly in the labor market. As it has been widely claimed (e.g., Arnett 2000, p. 476), these latter individuals continue to remain a "forgotten half that remains forgotten". Even though there are preliminary studies uncovering peculiarities of the emerging adult experiences of young workers compared to their counterparts who attend college (e.g., Luyckx et al. 2008b), this issue still represents a priority for psychology researchers' agenda. In particular, future studies should disentangle correlates of different identity configurations of emerging adults active in the labor market. Furthermore, it would be very valuable to pay attention to this issue considering also emerging adults who have difficulties to make the transition from school to work and have to cope with unemployment. In this respect, it is worthwhile to consider that Italy is among one the European countries with the highest rates of unemployment among young people (cfr. EU youth report 2009).

Conclusion

This article provides preliminary evidence generated from three studies covering a wide age range, from early adolescence to late emerging adulthood, about the correlates of different identity configurations. The final take home message can be synthesized saying that "two is better than one", that is when individuals have endorsed meaningful commitments in multiple life domains they have a greater sense of stability. These findings have practical implications, suggesting the importance of interventions aimed at promoting critical evaluations of identity alternatives in order to support adolescents and emerging adults in finding a set of fulfilling commitments (Schwartz and Pantin 2006).

Acknowledgments We greatly thank Alessandra Fermani for her help in data collection of Study 1.

References

Adams, G. R. (2010). *Ego-identity formation in adolescence and early adulthood: Theory and measurement*. US: Createspace.

Adams, G. R., & Marshall, S. (1996). A developmental social psychology of identity: Understanding the person in context. *Journal of Adolescence, 19*, 1–14.

Aleni Sestito, L., & Sica, L. S. (2010). La formazione dell'identità nella transizione dalla scuola superiore all'università: Dimensioni processuali e stili [Identity formation during the transition from high school to university: Processual dimensions and styles]. *Rassegna di Psicologia, 3*, 59–82.

Allen, M., & Yen, W. (1979). *Introduction to measurement theory*. Monterey, CA: Brooks/Col.

Alsaker, F. D., & Flammer, A. (2006). Pubertal maturation. In S. Jackson & L. Goossens (Eds.), *Handbook of adolescent development* (pp. 30–50). Hove and New York: Psychology Press.

Antonovsky, A. (1979). *Health stress and coping*. San Francisco: Jossey-Bass Publishers.

Antonovsky, A. (1987). *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass Publishers.

Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science and Medicine, 36*, 725–733.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469–480.

Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. Oxford: University Press.

Barni, D., & Tagliabue, S. (2005). "Sense of coherence scale" di Antonovsky: Un contributo alla validazione italiana [Antonovsky's "Sense of coherence scale": A contribution to the Italian validation]. *TPM—Testing, Psychometrics, Methodology in Applied Psychology, 12*, 151–166.

Bergman, L. R., Magnusson, D., & El Khouri, B. M. (2003). *Studying individual development in an interindividual context. A person-oriented approach*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Berzonsky, M. D. (2003). Identity style and well-being: Does commitment matter? *Identity: An International Journal of Theory and Research, 3*, 131–142.

Beyers, W., & Çok, F. (2008). Adolescent self and identity development in context. *Journal of Adolescence, 31*, 147–150.

Birmaher, B., Khetarpal, S., Brent, D., Cully, M., Balach, L., Kaufman, J., et al. (1997). The Screen for child anxiety related emotional disorders (SCARED): Scale construction and psychometric characteristics. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 545–553.

Bosma, H. A. (1985). *Identity development in adolescents: Coping with commitments.* Unpublished doctoral dissertation, University of Groningen, The Netherlands.

Bosma, H. A., & Jackson, S. (Eds.). (1990). *Coping and self-concept in adolescence*. Berlin: Springer.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, London: Harvard University Press.

Brown, W. (1910). Some experimental results in the correlation of mental abilities. *British Journal of Psychology, 3*, 296–322.

Brown, B. B. (2004). Adolescents' relationships with peers. In M. R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 363–394). New Jersey: Wiley.

Buzzi, C., Cavalli, A., & de Lillo, A. (2007). *Rapporto giovani [Youth report]*. Bologna, Italy: il Mulino.

Crocetti, E., Hale, W. W., I. I. I., Fermani, A., Raaijmakers, Q., & Meeus, W. (2009). Psychometric properties of the screen for child anxiety related emotional disorders (SCARED) in the general Italian adolescent population: A validation and a comparison between Italy and the Netherlands. *Journal of Anxiety Disorders, 23*, 824–829.

Crocetti, E., Palmonari, A., & Pojaghi, B. (2007). *The network of relationships of Italian emerging adults: The importance of family and peers*. Poster presented at 3rd conference on emerging adulthood (EA), Arizona, USA:Tucson.

Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008a). Identity formation in early and middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of Youth and Adolescence, 37*, 983–996.

Crocetti, E., Rubini, M., & Meeus, W. (2008b). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence, 31*, 207–222.

Crocetti, E., Schwartz, S., Fermani, A., Klimstra, T., & Meeus, W. (2011a). A cross-national study of identity statuses in Dutch and Italian adolescents: Status distributions and correlates. *European Psychologist,*. doi:10.1027/1016-9040/a000076.

Crocetti, E., Schwartz, S., Fermani, A., & Meeus, W. (2010a). The Utrecht management of identity commitments scale (U-MICS): Italian validation and cross-national comparisons. *European Journal of Psychological Assessment, 26*, 169–183.

Crocetti, E., Sica, L. S., Schwartz, S. J., Serafini, T., & Meeus, W. (2010b). The functions of identity scale: Validation in Italian late adolescents and emerging adults. *TPM—Testing, Psychometrics Methodology in Applied Psychology, 17*(2), 55–71.

Crocetti, E., Sica, L. S., Schwartz, S. J., Serafini, T., & Meeus, W. (2011). Identity styles, processes, statuses, and functions: Making connections among identity dimensions. (Submitted).

De Goede, I., Branje, S., & Meeus, W. (2009). Developmental changes and gender differences in adolescents' perceptions of friendships. *Journal of Adolescence, 32*, 1105–1123.

Deci, E. L., & Ryan, R. M. (2000). The 'What' and 'Why' of goal pursuits: Human need and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.

Deci, E. L., Ryan, R. M., Gagne, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country. *Personality and Social Psychology Bulletin, 27*, 930–942.

Dellas, M., & Jernigan, L. P. (1990). Affective personality characteristics associated with undergraduate ego identity formation. *Journal of Adolescent Research, 5*, 306–324.

Dunkel, C. S. (2005). The relationship between self-continuity and measures of identity. *Identity: An International Journal of Theory and Research, 5*, 21–34.

Erikson, E. (1950). *Childhood and society*. New York: Norton.

Erikson, E. (1968). *Identity youth and crisis*. New York: Norton.

Eriksson, M., & Lindström, B. (2006). Antonovsky's sense of coherence scale and the relation with health: A systematic review. *Journal of Epidemiological Community Health, 60*, 376–381.

European Communities (2009). *EU Youth Report*. Luxembourg: European Communities. Available online at http://ec.europa.eu/youth/pub/pdf/eu-youth-report_en.pdf.

Fadjukoff, P., Pulkkinen, L., & Kokko, K. (2005). Identity processes in adulthood: diverging domains. *Identity: An International Journal of Theory and Research, 5*, 1–20.

Fincham, F. D., & Cui, M. (2010). *Romantic relationships in emerging adulthood*. Cambridge: Cambridge University Press.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*, 103–115.

Goossens, L. (2001). Global versus domain-specific statuses in identity research: A comparison of two self-report measures. *Journal of Adolescence, 24*, 681–699.

Goossens, L., & Luyckx, K. (2007). Identity development in college students: Variable-centered and person-centered analyses. In M. Watzlavick & A. Born (Eds.), *Capturing identity. Quantitative and qualitative methods* (pp. 105–118). Lahnam, Maryland: University Press of America.

Gore, P. A., Jr. (2000). Cluster analysis. In H. E. A. Tinsley & S. D. Brown (Eds.), *Handbook of applied multivariate statistics and mathematical modeling* (pp. 297–321). San Diego, CA: Academic Press.

Hardy, S. A., Pratt, M. W., Pancer, S. M., Olsen, J. A., & Lawford, H. L. (2010). Community and religious involvement as contexts of identity change across late adolescence and emerging adulthood. *International Journal of Behavioral Development, 35*, 125–135.

Helsen, M., Vollebergh, W., & Meeus, W. (2000). Social support from parents and friends and emotional problems in adolescence. *Journal of Youth and Adolescence, 29*, 319–335.

Jahromi, P., Crocetti, E., & Buchanan, C. (2012). A cross-cultural examination of adolescent civic engagement: Comparing Italian and American volunteerism and political involvement. *Journal of Prevention & Intervention in the Community, 40*.

King, P. E., & Roeser, R. W. (2009). Religion and spirituality in adolescent development. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 435–478). Hoboken, NJ: Wiley.

Klimstra, T., Hale, W. W. I. I. I., Raaijmakers, Q., Branje, S., & Meeus, W. (2010). Identity formation in adolescence: Change or stability? *Journal of Youth and Adolescence, 39*, 150–162.

Kovacs, M. (1985). The children's depression inventory. *Psychopharmacology Bulletin, 21*, 995–998.

Kovacs, M. (1988) *Children's Depression Inventory. Questionario di autovalutazione [Children's Depression Inventory. Self-report questionnaire]* (Adattamento italiano a cura di M. Camuffo, R. Cerutti, L. Lucarelli, R. Mayer) [Italian adaptation by M. Camuffo, R. Cerutti, L. Lucarelli, R. Mayer]. Firenze, Italy: O. S. Organizzazioni Speciali.

Kroger, J., & Marcia, J. E. (2011). The identity statuses: Origins, meanings, and interpretations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 31–53). New York: Springer.

Kroger, J., Martinussen, M., & Marcia, J. E. (2010). Identity status change during adolescence and young adulthood: A meta-analysis. *Journal of Adolescence, 33*, 683–698.

Lanz, M., & Tagliabue, S. (2007). Do I really need someone in order to become an adult? Romantic relationships during emerging adulthood in Italy. *Journal of Adolescent Research, 22*, 531–549.

Livi Bacci, M. (2008). *Avanti giovani, alla riscossa [Go ahead young people, to the rescue!]*. Bologna, Italy: il Mulino.

Lustig, D. C., & Strauser, D. R. (2002). The relationship between sense of coherence and career thoughts. *Career Development Quarterly, 51*, 2–11.

Luyckx, K., Goossens, L., & Soenens, B. (2006). A developmental contextual perspective on identity construction in emerging adulthood: Change dynamics in commitment formation and commitment evaluation. *Developmental Psychology, 42*, 366–380.

Luyckx, K., Lens, W., Smits, I., & Goossens, L. (2010). Time perspective and identity formation: Short-term longitudinal dynamics in college students. *International Journal of Behavioral Development, 34*, 238–247.

Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., et al. (2008a). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality, 42*, 58–82.

Luyckx, K., Schwartz, S. J., Goossens, S., & Pollock, S. (2008b). Employment, sense of coherence, and identity formation contextual and psychological processes on the pathway to sense of adulthood. *Journal of Adolescent Research, 23*, 567–591.

Luyckx, K., Vansteenkiste, M., Goossens, L., & Duriez, B. (2009). Basic need satisfaction and identity formation: Bridging self-determination theory and process-oriented identity research. *Journal of Counseling Psychology, 56*, 276–288.

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*, 551–558.

Marcia, J. E. (1993). The status of the statuses: Research review. In J. E. Marcia, J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), *Identity: A handbook for psychosocial research* (pp. 22–41). New York: Springer.

Marcia, J. E., Waterman, A. S., Matteson, D. R., Archer, S. L., & Orlofsky, J. L. (1993). *Identity: A handbook for psychosocial research*. New York: Springer.

Meeus, W. (1996). Studies on identity development in adolescence: An overview of research and some new data. *Journal of Youth and Adolescence, 25*, 569–598.

Meeus, W. (2011). The study of adolescent identity formation 2000–2010. A review of longitudinal research. *Journal of Research on Adolescence, 21*, 75–94.

Meeus, W., Iedema, J., Helsen, M., & Vollebergh, W. (1999). Patterns of adolescent identity development: Review of literature and longitudinal analysis. *Developmental Review, 19*, 419–461.

Meeus, W., Iedema, J., & Maassen, G. H. (2002). Commitment and exploration as mechanisms of identity formation. *Psychological Reports, 90*, 771–785.

Meeus, W., van de Schoot, R., Keijsers, L., Schwartz, S. J., & Branje, S. (2010). On the progression and stability of adolescent identity formation. A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child Development, 81*, 1565–1581.

Montgomery, M. J., & Côté, J. E. (2003). College as a transition to adulthood. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 149–172). Malden, MA: Blackwell.

Ollendick, T. H., King, N. J., & Muris, P. (2002). Fears and phobias in children: Phenomenology, epidemiology, and etiology. *Child Adolescent Mental Health, 7*, 98–106.

Pastorino, E., Dunham, R. M., Kidwell, J., Bacho, R., & Lamborn, S. D. (1997). Domain specific gender comparisons in identity development among college youth: Ideology and relationships. *Adolescence, 32*(127), 559–577.

Proulx, T., & Chandler, M. J. (2009). Jekyll and Hyde and me: Age-graded differences in conceptions of self-unity. *Human Development, 52*, 261–286.

Scabini, E., Marta, E., & Lanz, M. (2006). *Transition to adulthood and family relations: An intergenerational perspective*. Hove, New York: Psychology Press.

Schwartz, S. J., & Pantin, H. (2006). Identity development in adolescence and emerging adulthood: The interface of self, context, and culture. In A. Prescott (Ed.), *The concept of self in psychology* (pp. 45–85). Hauppage, NY: Nova Science Publishers.

Serafini, T. E. (2008). *March). The functions of identity scale: Validity and test-retest reliability*. Chicago: Poster presented at the Biennial Meeting of the Society for Research on Adolescence. Illinois.43.

Serafini, T. E., & Adams, G. R. (2002). Functions of identity: Scale construction and validation. *Identity: An International Journal of Theory and Research, 2*, 361–389.

Serafini, T. E., Maitland, S. B., & Adams, G. R. (2006). *The functions of identity scale: Revisions, validation and model testing*. San Francisco: Poster presented at the Biennial Meeting of the Society for Research on Adolescence. California.

Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological need. *Journal of Personality and Social Psychology, 80*, 325–339.

Sherif, M., & Sherif, C. (1964). *Reference groups exploration into conformity and deviation of adolescents*. New York: Harper & Row.

Soenens, B., & Vansteenkiste, M. (2011). When is identity congruent with the self? A self-determination theory perspective. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 381–402). New York: Springer.

Spearman, C. C. (1910). Correlation calculated from faulty data. *British Journal of Psychology, 3*, 271–295.

Springer, D. W., Abell, N., & Nugent, W. R. (2002). Creating and validating rapid assessment instruments for practice and research: Part 2. *Research on Social Work Practice, 12*, 768–795.

Vansteenkiste, M., Zhou, M., Lens, W., & Soenens, B. (2005). Experiences of autonomy and control among Chinese learners: Vitalizing or immobilizing? *Journal of Educational Psychology, 97*, 468–483.

von Eye, A., & Bogat, A. (2006). Person-oriented and variable-oriented research: Concepts, results, and development. *Merrill-Palmer Quarterly, 52*, 390–420.

Watzlawick, M., & Born, A. (Eds.). (2007). *Capturing identity Quantitative and qualitative methods*. Lahnam, Maryland: University Press of America.

World Health Organization. (2001). *The world health report- mental health: New understanding*. New Hope. Geneva: World Health Organization.

Author Biographies

Elisabetta Crocetti is a post-doctoral researcher at the University of Milano-Bicocca. She received her Ph.D. in Educational Sciences from the University of Macerata. Her major research interests include identity formation in adolescence and emerging adulthood.

Marta Scrignaro is a post-doctoral researcher at the University of Milano-Bicocca. She received her Ph.D. in Psychology and Social Science from the University of Milano-Bicocca. Her major research interests include the promotion of resilience resources and post-traumatic growth during life span transitions.

Luigia Simona Sica is a post-doctoral researcher at the University of Turin. She received her Ph.D. in Psychological Sciences from the University of Naples "Federico II". Her major research interests include identity formation and narrative approach.

Maria Elena Magrin is an Associate Professor of Social Psychology at the University of Milano-Bicocca. She received her Ph.D. in Social Psychology from the Catholic University of Milan. Her major research interests include the promotion of psychological well-being and resilience during life span transitions.