Original article

Identity styles, dimensions, statuses, and functions: Making connections among identity conceptualizations

Styles, dimensions, statuts et fonctions d'identité : établir des liens entre les différentes conceptualisations de l'identité

Elisabetta Crocetti a, *, Luigia Simona Sica b, c, Seth J. Schwartz d, Toni Serafini e, Wim Meeus f

a Research Centre on Adolescent Development, University of Utrecht, Heidelbergaan 2, 3584 TC Utrecht, The Netherlands
b Department of Psychology, University of Turin, Turin, Italy
c Department of Relational Sciences, University of Naples Federico II, Naples, Italy
d Department of Epidemiology and Public Health, University of Miami, Miami, USA
e Department of Sexuality, Marriage, and Family Studies, St. Jerome’s University, St. Jerome, Canada
f Research Centre on Adolescent Development, University of Utrecht, Utrecht, The Netherlands

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R É S U M É

Le but de cette étude était d'examiner les liens entre les processus à la base du développement de l'identité et les fonctions que remplit l'identité. En particulier, nous avons tenté de dégager les liens qui existent entre les styles d'identité (identity styles : Berzonsky, 1989), les dimensions d'identité (Crocetti, Rubini, & Meeus, 2008) et les statuts d'identité (Crocetti, Rubini, Luyckx, & Meeus, 2008), d'une part, et les fonctions de l'identité (Adams & Marshall, 1996), d'autre part. Notre échantillon était composé de 158 jeunes Italiens (dont 38% de sexe masculin), âgés de 17 à 22 ans. Nos résultats indiquent que les styles informationnels et normatifs, ainsi que l'engagement et une évaluation réfléchie des engagements en cours sont associés positivement aux fonctions d'identité alors que le style diffus-évitant ainsi que la reconsideration de l'engagement sont négativement associés aux fonctions d'identité. Finalement, nous avons constaté des écarts significatifs de fonctions d'identité selon le statut.

R É S U M É

Identity formation is a core developmental task of adolescence (Erikson, 1950, 1968). The biological (e.g., puberty), cognitive (e.g., acquisition of hypothetic-deductive reasoning), and social (e.g., transformations in interpersonal relationships) changes that characterize this period prompt individuals to reflect on their earlier
identifications and to explore various alternatives in order to identify and enact relevant commitments in various identity domains (e.g., educational, interpersonal, political, religious, civic). At the end of adolescence, only a limited number of individuals have achieved a firm sense of identity after a period of active exploration (Kroger, 2007). Therefore, identity development continues to represent a key developmental task of emerging adulthood, which represents the late teens and the twenties (Arnett, 2000). In fact, more than in any other period of life, emerging adults often have the freedom to explore a large array of alternatives in education, work, love, and a number of other identity domains before making enduring choices (Arnett, 2004).

Erikson’s lifespan theory of psychosocial development (1950;1968) represents a seminal contribution to the field of identity studies (Bosma & Kunnen, 2001). Erikson conceptualized ego identity both as a conscious sense of individual uniqueness and as an unconscious striving for continuity of experience. Individuals who approach the identity formation task in a self-directed and authentic manner are likely to develop a set of firm commitments obtained through combining and integrating relevant earlier identifications into a unique and personal mold. On the contrary, young people who do not have commitments are in a condition of identity confusion.

The first, and perhaps most important, empirical elaboration of Erikson’s (1950, 1968) views on identity formation has been Marcia’s (1966) identity status paradigm. Like Erikson, Marcia stated that adolescence is a period of crisis in which important life choices need to be made. Based on his clinical work, Marcia proposed that the two poles proposed by Erikson (i.e., identity achievement vs. identity confusion) could be incorporated into a larger model. Marcia’s model was based on the dimensions of exploration and commitment. 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. Commitment involves making a relatively firm choice about an identity domain and engaging in significant activities geared toward the implementation of that choice.

Dividing exploration and commitment into “present” or “absent” and crossing these dimensions yields four identity statuses. In the achievement status, individuals have made a commitment in a specific identity domain following a period of active exploration; in the foreclosure status, young people have made a commitment with little or no prior exploration; in the moratorium status, young people are actively exploring various alternatives and have not yet made a commitment; finally, in the diffusion status, young people have not engaged in a proactive process of exploration of different alternatives, nor have they made a commitment.

Marcia’s model has inspired a large amount of research. 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 reviews, see Kroger & Marcia, 2011; Marcia, 1993; Meeus, 1996). Since the late 1980s, several scholars have called for an expansion of Erikson’s (1950, 1968) and Marcia’s (1966) conceptualizations of identity formation (Berzonsky & Adams, 1999; Côté & Levine, 1988, 2002; Schwartz, 2001).

In recent years, various researchers have introduced newer models based on these recommendations (cf. Meeus, 2011). In this paper, we focused on three of these newer conceptualizations and on their links. In particular, we considered:

• the identity style model, which refers to the social-cognitive strategies individuals can utilize to form their identity (Berzonsky, 1989, 2004, 2011);
• the three-factor identity dimensional model that focuses on commitment, in-depth exploration, and reconsideration of commitment (Crockett, Rubini, & Meeus, 2008; Crockett, Rubini, Luyckx, & Meeus, 2008);
• and the identity functions model, which focuses on the outcomes of a well-established identity (e.g., structure, harmony; Adams & Marshall, 1996; Serafini & Adams, 2002).

1. The identity style model

Berzonsky (1989) postulated that individuals use different social-cognitive strategies or processing orientations to deal with or avoid the task of identity formation: informational, normative, and diffuse-avoidant. Adolescents utilizing an informational orientation are self-reflective and actively seek out and evaluate self-relevant information. Those with a normative orientation more automatically adopt prescriptions and values from significant others and conform to these others’ expectations. Young people with a diffuse-avoidant orientation procrastinate and delay dealing with identity issues for as long as possible.

During the last two decades, a large amount of research (for reviews, see Berzonsky, 2004, 2011) has investigated the relationship between identity styles and relevant correlates. Relationships between identity styles and identity statuses are among the most consistently replicated findings in the identity literature. Indeed, several studies have demonstrated that the informational style is positively associated with identity achievement and moratorium, that the normative style is strongly related to foreclosure, and that the diffuse/avoidant style is positively related to diffusion (Adams, Berzonsky, & Keating, 2006; Berzonsky, 1989; Berzonsky & Kuk, 2000; Berzonsky & Neimeyer, 1994; Krettenauer, 2005; Schwartz, Mullis, Waterman, & Dunham, 2000; Streitmatter, 1993). Hence, findings indicate that individuals who use either informational or normative styles are most likely to form strong commitments. However, information-oriented individuals choose their commitments after having explored various identity alternatives, whereas normative oriented individuals are more prone to choosing their commitments based on the advice of significant others, without considering other alternatives. This distinction is parallel to the distinction between the achieved and foreclosure statuses.

2. The three-factor identity dimensional model

Since the mid-1980s, European scholars (Bosma, 1985; Luyckx, Goossens, Soens, & Beyers, 2006; Meeus, 1996; Meeus, Jeneda, Helsen, & Vollebergh, 1999) have identified multiple forms of commitment and exploration involved in the identity formation process. The consideration of multiple forms of commitment and exploration, along with the use of more refined, person-centered, and data-driven classification methods (e.g., cluster analysis, latent class analysis), has produced additional variants of Marcia’s original identity statuses (e.g., Crocetti et al., 2008a; Luyckx, Goossens, Soens, Beyers, & Vansteenkiste, 2005; Luyckx et al., 2008; Meeus, Van de Schoot, Keijers, Schwartz, & Branje, 2010). These statuses allow for more fine-grained distinctions and nuances in the examination of identity development.

Within this line of research, Meeus, Crocetti, and colleagues (Crocetti et al., 2008b; Crocetti, Schwartz, Ferrmani, & Meeus, 2010; Meeus et al., 2010), building upon previous work by Meeus (Meeus, 1996; Meeus et al., 1999) proposed a model that encompasses three identity dimensions: commitment, in-depth exploration, and reconsideration of commitment. Specifically, commitment refers to firm choices that adolescents have enacted with regard to various developmental domains and to the self-confidence they derive from these choices; in-depth exploration represents the extent to which adolescents reflect on their current commitments, search for additional information, and talk with others about their choices;
and reconsideration of commitment refers to the possibility of discarding or revising one’s current commitments when they are no longer satisfactory.

Cluster-analytic work using these three dimensions has indicated that youth can be categorized into five identity statuses, four of which resemble Marcia’s original identity statuses (with the caveat that foreclosure is relabeled “early closure” by Meeus et al., 2010). These studies have also extracted a fifth status, labelled searching moratorium, which represents a variant of Marcia’s moratorium status (Crocetti et al., 2008a; Meeus et al., 2010) and involves revising one’s current commitments. According to Meeus et al.’s conceptualization, the achieved status consists of individuals who score high on commitment and in-depth exploration, but low on reconsideration of commitment; the early closure status represents 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 score low on commitment, moderately on in-depth exploration, and high on reconsideration of commitment; the diffusion status represents individuals with low scores on all three dimensions; and, the searching moratorium status is comprised of individuals high on all three dimensions. Therefore, the two moratorium statuses differ in terms of the base from which reconsideration is attempted: youth in the “classical” moratorium status are not committed and are evaluating alternatives in the service of making identity-related commitments; whereas their counterparts in the “searching moratorium” status are seeking to revise commitments that have already been enacted, and are able to do so from the secure base provided by these commitments. Studies have consistently indicated that these identity statuses could be empirically evaluated in large community samples of both Dutch (Crocetti et al., 2008a; Meeus et al., 2010) and Italian (Crocetti, Schwartz, Ferrmani, Klimstra, & Meeus, 2012) adolescents, in ethnic minority groups (Crocetti, Ferrmani, Pojaghi, & Meeus, 2011; Crocetti et al., 2008a), as well as in juvenile delinquents and clinically referred youth (Klimstra et al., 2011).

3. The identity functions model

A further important contribution to the identity field has been that of Adams and Marshall (1996; Serafini & Adams, 2002), focusing on the “functions” of identity. Drawing upon the Eriksonian notion that identity fulfills a self-regulatory function, Adams and Marshall (1996) proposed a model including five identity functions. First, 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 (cf. Dunkel, 2005). Third, identity provides individuals with a future orientation and with a sense of continuity among past, present, and future (Luyckx, Lens, Smits, & Goossens, 2010). Fourth, identity offers “goals” and direction through commitments and values chosen by individuals (McGregor & Little, 1998). Finally, identity provides a sense of personal control, free will, 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 (cf. Côté & Levine, 2002).

These identity functions focus on the outcomes of successful and mature identity development, thus mapping onto Erikson’s premise of an “optimal identity” (1968, p. 165). The identity functions model differs from Berzonsky’s or Marcia’s models because its focus is exclusively on what a well-established, healthy sense of identity provides to an individual; the functions of identity shift the focus from how identity is constructed to the outer workings of identity construction — the components that are integral to a well-functioning sense of self.

All five identity functions have been consistently positively related to the achieved identity status (Serafini, 2007; Serafini & Adams, 2002). Furthermore, an unpublished study conducted with Canadian youth (Serafini, 2008) showed some preliminary evidence about links between identity functions and identity styles, indicating that identity functions are positively related to both information-oriented and normative identity styles, and negatively related to the diffuse-avoidant identity style.

4. Gender differences in identity

Gender may be of importance in identity formation (Lewis, 2003; Schwartz, Adamson, Ferrer-Wreder, Dillon, & Berman, 2006). However, gender differences have been consistently documented for some identity constructs but not for others (Kroger, 1997). More specifically, regarding identity styles, a recent meta-analysis (Bosch & Card, 2012) has indicated no significant gender differences for the informational identity style, a trivial gender difference for the normative identity style (mean r = 0.04) where women scored higher than men; and a small gender difference for the diffuse-avoidant identity style (mean r = 0.16) such that males scored higher than females. Analyses of the heterogeneity in effect sizes across studies suggested that females scored higher than males in the informational style in high school samples but not in college samples. This evidence suggests that females may begin exploring sooner than males (i.e., in middle adolescence) but that by late adolescence and emerging adulthood, males may catch up.

These patterns of gender differences have been further supported by longitudinal studies on identity dimensions. Klimstra, Hale, Raajmakers, Brande, and Meeus (2010) found that gender differences in commitment, in-depth exploration, and reconsideration of commitment were larger in early adolescence but tended to diminish in late adolescence. Thus, girls seem to be ahead of boys in identity formation in early to middle adolescence, with boys catching up in middle to late adolescence.

Similarly, in a longitudinal study on identity status classifications, Meeus et al. (2010) found that girls were more likely to be achieved or early closed, and less likely to be diffused and in both moratorium statuses, compared to boys. Thus, girls are more likely to be committed than boys. However, again, boys tended to “catch up” during adolescence. This pattern is consistent with the review by Kroger (1997) and suggests that earlier physical and cognitive maturation in girls may account for some of this pattern. Girls reach puberty 1 to 2 years earlier than boys (Beuven et al., 2000), and in early adolescence, girls tend to be up to a full year ahead of boys in several aspects of brain development (Giedd et al., 1999; Colomb & Lynn, 2004). Therefore, girls might reach the mature identity statuses earlier than boys, whereas boys catch up during adolescence.

To date, studies conducted both in North America (Serafini, 2008; Serafini, Maitland, & Adams, 2003) and Southern Europe (Crocetti, Sica, Schwartz, Serafini, & Meeus, 2010) have consistently found no mean differences on identity functions by gender. However, these studies involved mainly emerging adult samples and were not able to detect any gender differences that could have characterized younger cohorts.

5. Age differences in identity

Similarly to gender differences, age patterns have been found to be more evident for some identity conceptualizations than for others. In particular, although the effect sizes are quite modest, there is some evidence for developmental changes in identity style scores: as adolescents and young adults mature, they tend to rely more on the informational style (cf. Berzonsky, 2011).
Klimstra et al. (2010) examined longitudinal changes in identity dimensions. They found maturational changes in identity dimensions, indicated by a decreasing tendency for reconsideration and an increasing in-depth exploration. Mean levels of commitment remained stable over time, and rank-order stability of commitment, in-depth exploration, and reconsideration did not change with age.

Research on identity status change during adolescence and young adulthood has been recently meta-analytically reviewed by Kroger, Martinussen, and Marcia (2010). These authors found a prevalence of identity stability, with 49% of individuals remaining in the same identity status across a two-time interval (with a mean time interval between data collection of three years). Among individuals who shifted from one status to another, identity progressions (e.g., from diffusion to moratorium, from moratorium to achievement) were more common than identity regressions (e.g., from foreclosure to diffusion, from achievement to foreclosure).

In fact, identity progressions were reported by 36% of individuals, compared to 15% of youth who reported identity regressions. A similar picture emerged in a recent five-wave longitudinal study (Meeus et al., 2010): 63% of the adolescents remained in the same identity status across the five waves, and those exhibiting identity shifts primarily reported identity progressions (i.e., the number of diffusions, moratoriums and searching moratoriums decreased, whereas the representation of the high-commitment statuses increased).

To date, only one study (Crocetti, Sica et al., 2010) has examined age differences on identity functions; no significant age variations in identity functions were found. Overall, research on identity age patterns suggests some progressive changes, even though most youth tend to remain in the same identity status. These results can be interpreted in light of the extended transition to adulthood typical of young people from Western countries, and in light of the effects of this extended transition on identity development (Arnett, 2004). More specifically, this delay might have a strong impact on adolescent and emerging adult identity development by stimulating identity exploration and encouraging young people to postpone enacting identity commitments (cf. Crocetti, Schwartz et al., 2012).

6. The present study

On the basis of the literature reviewed so far, the primary purpose of the present study was to examine the connections between the processes underlying identity development and the functions that identity provides. Specifically, we sought to ascertain the associations of identity styles (Berzonsky, 1989), identity dimensions (Crocetti et al., 2008b), and identity statuses (Crocetti et al., 2008a; Meeus et al., 2010) to identity functions (Adams & Marshall, 1996). In the areas of identity dimensions and statuses, we took into account identity in both the educational and interpersonal domains, given the centrality of these two domains for late adolescents and emerging adults (e.g., Crocetti, Scrignaro, Sica, & Magrin, 2012).

First, we examined gender and age differences on these identity conceptualizations. In line with prior literature (Bosch & Card, 2012; Klimstra et al., 2010; Kroger, 1997; Meeus et al., 2010), we expected to find few small and gender differences in identity styles, dimensions, and statuses. Furthermore, consistently with available evidence (Crocetti, Sica et al., 2010; Serafini, 2008; Serafini et al., 2003), we did not expect gender differences in identity functions. Concerning age differences, we expected to find small or moderate progressive differences primarily for identity styles, dimensions, and statuses (cf. Berzonsky, 2011; Klimstra et al., 2010; Kroger et al., 2010; Meeus et al., 2010), whereas we did not hypothesize age variations in identity functions (Crocetti, Sica et al., 2010).

Second, we examined the links between identity styles and identity functions. Given that the informational and normative styles promote formation of a stable identity, albeit through different mechanisms (Berzonsky, 1989, 2003, 2004), we hypothesized that both of these styles would be positively associated with identity functions. On the contrary, the diffuse style, which interferes with identity formation, was expected to be negatively related to all five identity functions. Thus, we hypothesized to confirm previous unpublished evidence presented by Serafini (2008).

Third, we investigated associations between identity dimensions (Crocetti et al., 2008b) and identity functions. We expected that commitment and in-depth exploration, which promote the formation of a firm identity (Meeus et al., 2010), would be positively linked to identity functions. On the contrary, we expected that reconsideration of commitment, which indicates identity instability and distress due to relinquishing existing commitments (Crocetti et al., 2011), would be negatively related to identity functions.

Finally, we sought to explore links between identity statuses and identity functions. To accomplish this, we first extracted identity statuses through a data-driven approach. Based on prior research conducted with different European samples (Crocetti et al., 2008a; Crocetti, Schwartz et al., 2012; Meeus et al., 2010), we expected that the combination of commitment, in-depth exploration, and reconsideration of commitment would yield five distinct identity statuses (i.e., achievement, early closure, moratorium, searching moratorium, and diffusion). Thus, we could examine whether youth classified into the various identity statuses differed in terms of the five identity functions. In this way, we were able to test whether findings from studies (Serafini, 2007; Serafini & Adams, 2002) conducted in North America using Marcia’s paradigm could be replicated in a different cultural context (i.e., in a Southern European country) and using a recent extension of Marcia’s model.

We expected to find differences primarily between the achieved and diffused statuses, because they represent the two poles of the continuum hypothesized by Erikson (1950, 1968). Specifically, we expected that achieved youth, who have enacted relevant commitments and have thoughtfully explored them, would report the highest scores on identity functions. On the contrary, their diffused counterparts, who have not endorsed commitments or engaged in systematic exploration, would be expected to exhibit the lowest scores on each of the identity functions (Serafini & Adams, 2002).

7. Method

7.1. Participants

Participants were 1158 Italian youth (435 males and 723 females), aged 17 to 22 years (Mage = 19.43 years, SD = 1.17). Two age groups were represented in the sample: a late adolescent group and an emerging adult group. The late adolescent group consisted of 389 students (152 males and 237 females) in their last year of secondary school (Mage = 18.30 years, SD = 0.64; age range 17–19).1 Specifically, 113 (29%) were attending a lyceum (i.e., high-level secondary schools that prepare students for university studies); 103 (26.5%) were attending a technical school; and 173 (44.5%) were attending a vocational school.

The emerging adult sample included 769 students (283 males and 486 females) attending three Italian universities. Students were in their first (n = 411) or second (n = 358) year of university.

1 In Italy, students in secondary school are still considered adolescents (Palmonari, 2011). Some students complete high school when they are 18 years old (if they are born in the second half of the year), and other students complete high school when they are already 19 (if they are born in the first half of the year). For this reason, both the late adolescent group and the emerging adult group contain some participants who are 19.
Their ages ranged from 19 to 22 years (Mage = 20.01, SD = 0.93). University students were enrolled in various areas of study:

- law (n = 256; 33.3%);
- psychology (n = 146; 19%);
- sociology (n = 110; 14.3%);
- educational sciences (n = 64; 8.3%);
- architecture (n = 47; 6.1%);
- economics (n = 38; 4.9%);
- communication sciences (n = 37; 4.8%);
- philosophy (n = 34; 4.4%);
- political sciences (n = 30; 3.9%);
- and languages (n = 7; 0.9%).

8. Procedure

Before the study was conducted, permission to administer questionnaires was obtained from the principals of the high schools and the deans of the university faculties. For late adolescents younger than 18, parental consent was also obtained. Students were contacted in high schools or in university buildings by a researcher. They were provided with written information about the research and asked if they wished to participate. Approximately 99% of the students who were approached chose to participate. They completed the study measures as an anonymous self-report questionnaire.

9. Measures

9.1. Identity styles

The Italian version (Crocetti, Rubini, Berzonsky, & Meeus, 2009) of the revised Identity Style Inventory (ISI-3; Berzonsky, 1992) was used. This measure consists of 30 items with a response scale ranging from 1 (not at all like me) to 5 (very much like me). Sample items include: “I’ve spent a great deal of time thinking seriously about what I should do with my life” and “When making important decisions I like to have as much information as possible” (information-oriented style; 11 items); “I prefer to deal with situations where I can rely on social norms and standards” and “I’ve more-or-less always operated according to the values with which I was brought up” (normative style: nine items); and “I’m not really thinking about my future now: it’s still a long way off” and “I try not to think about or deal with problems as long as I can” (diffuse-avoidant style: ten items). Cronbach’s alphas were 0.60 for scores on the informational style subscale, 0.59 for scores on the normative style subscale, and 0.73 for scores on the diffuse-avoidant style subscale. These Cronbach’s alphas are comparable to those reported in studies using the ISI in other languages (e.g., Berzonsky, Macek, & Nurmi, 2003).

9.2. Identity dimensions

The Italian version (Crocetti, Schwartz et al., 2010) of the Utrecht-Management of Identity Commitments Scale (U-MICS; Crocetti et al., 2008b) was used to assess commitment, in-depth exploration, and reconsideration of commitment. The U-MICS consists of 13 items with a response scale ranging from 1 (completely untrue) to 5 (completely true). In the current study, we assessed identity dimensions in one ideological domain (education) and in one interpersonal domain (best friend). Thus, each item was presented once for the ideological domain and once for the interpersonal domain, for a total of 26 items. Sample items include: “My education/best friend gives me certainty in life” and “My education/best friend allows me to face the future with optimism” (commitment; five items for each domain); “I think a lot about my education/best friend” and “I often talk with other people about my education/best friend” (in-depth exploration; five items for each domain); and “I often think it would be better to try to find a different education/best friend” and “I’m looking for a different education/best friend” (reconsideration of commitment; three items for each domain). Cronbach’s alphas were 0.82 and 0.85 for commitment, 0.65 and 0.66 for in-depth exploration, 0.75 and 0.81 for reconsideration of commitment, in the educational and interpersonal domains, respectively.

9.3. Functions of identity

We employed the Italian version (Crocetti, Sica et al., 2010) of the 15-item Functions of Identity Scale (Serafini, 2007). 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” and “I feel I have a consistent sense of self from one day to the next” (structure); “I have constructed my own personal goals for myself” and “I tend to set goals and then work towards making them happen” (goals); “My values and beliefs reflect who I am” and “My values and beliefs are consistent with the commitments that I make in my life at this time” (harmony); “When I’m doing isn’t working, I am able to find different approaches to meeting my goal(s)” and “The decisions I make about how to behave and act are based on my personal choices” (personal control); and “I have a good idea of what my future holds for me” and “I am clear about who I will be in the future” (future). As reported in Crocetti, Sica et al. (2010), confirmatory factor analyses indicated that the five-factor structure of the FIS fit the data well, both across gender and in late adolescent and emerging adult age groups. In this sample, Cronbach’s alphas were 0.54 for structure, 0.64 for harmony, 0.61 for goals, 0.66 for future, and 0.50 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, Abell, & Nugent, 2002; Tabachnick & Fidell, 1996). The mean inter-item correlations were 0.28 for structure, 0.37 for harmony, 0.35 for goals, 0.39 for future, and 0.25 for personal control. Given these values, applying the Spearman-Brown prophecy formula (Allen & Yen, 1979; Brown, 1910; Spearman, 1910), which predicts what reliability would be if more items were added, we found that 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 (i.e., higher than 0.60) Cronbach’s alpha values.

10. Results

10.1. Measurement models

As a preliminary step, we tested a measurement model in which ISI, U-MICS, and FIS items were used as indicators of latent variables corresponding to identity styles (i.e., informational, normative, and diffuse-avoidant), dimensions (i.e., commitment, in-depth exploration, and reconsideration of commitment in the educational and interpersonal domains), and functions (i.e., structure, harmony, goal, future, and personal control), respectively. We performed these Confirmatory Factor Analyses using AMOS 19 (Arbuckle, 2010), using full-information maximum likelihood estimation. Using a large number of indicators in CFAs often results in a large number of correlated residuals, which decrease both the fit of the model and the utility of the latent variable in capturing the constructs of interest (Marsh, Hau, Balla, & Grayson, 1998). Thus, for each latent factor we constructed three observed indicators, using a parceling method in cases where a scale consisted of more
than three items. For the FIS, where each subscale consists of three items, and the U-MICS reconsideration of commitment factors, each latent factor was defined by the three items on the corresponding subscale. In contrast, for the ISI styles and U-MICS commitment and in-depth exploration, parcels were used as indicators. Indeed, parceling is the suggested procedure, in large samples, for scales consisting of five or more items (Bagoszi & Heibergton, 1994).

Model fit was ascertained using various indices (Kline, 2005): the ratio of the chi-square statistic to the degrees of freedom ($\chi^2/df$) should be less than 3, with acceptable values between 1 and 5; the Goodness of Fit Index (GFI) and the Comparative Fit Index (CFI) should exceed 0.95, with values higher than 0.90 considered acceptable; and the Root Mean Square Error of Approximation (RMSEA) should be less than 0.08.

We tested the fit of two models: a first-order model with correlated latent factors and a second-order model with the first-order factors attached to a single second-order factor. In the first-order model, 14 latent factors were considered: three for identity styles (i.e., informational, normative, and diffuse-avoidant), six for identity dimensions (i.e., commitment, in-depth exploration, and reconsideration of commitment for the educational and interpersonal domains); and five for identity functions (i.e., structure, harmony, goals, future, and personal control). In the second-order model, all previous latent factors loading on a second-order factor represented by a general identity construct.

Findings indicated that the fit of the first-order model ($\chi^2 = 2795.97$, $df = 724$; $\chi^2/df = 3.86$; GFI = 0.89; CFI = 0.85; RMSEA = 0.05) was significantly better ($\Delta \chi^2 = 1275.84$, $\Delta df = 77$, $p < 0.001$; $\Delta CFI = 0.08$) than the fit of the second-order model ($\chi^2 = 4071.81$, $df = 801$; $\chi^2/df = 5.08$; GFI = 0.84; CFI = 0.77; RMSEA = 0.06). These results indicate that the identity constructs under investigation are sufficiently distinct that they cannot be collapsed into a single overall identity variable. It is worthwhile reporting that the correlations “within” latent identity constructs were larger (they ranged from 0.34 to 0.40) than the correlations “across” latent identity constructs (ranging from −0.16 to 0.25), proving further support for the distinctions between the concepts taken into account.

10.2. Gender and age differences

In order to examine gender and age differences in the identity constructs under investigation, we performed a Multivariate Analyses of Variance (MANOVA) on identity styles, identity dimensions, and identity functions scores, respectively, with gender and age group as independent variables.

10.2.1. Identity styles

Results of the MANOVA indicated that the identity style scores differed significantly by gender, Wilks' $\lambda = 0.99$; $F(6, 1149) = 2.05$, $P = 0.06$, $\eta^2 = 0.01$. Results of follow-up univariate analyses (Table 1) indicated significant gender differences in-depth exploration for both the educational and interpersonal domains (females scored higher than males). Additionally, females reported higher commitment than males in the interpersonal domain. Significant age differences were observed for all the three identity dimensions only in the educational domain: emerging adults scored higher on commitment and in-depth exploration than adolescents, who, in turn, reported higher reconsideration of commitment than emerging adults.

10.2.3. Identity functions

Results of the MANOVA indicated that the identity functions scores (Table 1) did not differ significantly by gender (Wilks' $\lambda = 0.99$; $F(5, 1150) = 1.20$, $P = 0.31$, $\eta^2 < 0.01$), age group (Wilks' $\lambda = 0.99$; $F(5, 1150) = 1.38$, $P = 0.23$, $\eta^2 = 0.01$), or the gender x age group interaction (Wilks' $\lambda = 0.99$; $F(5, 1150) = 1.55$, $P = 0.17$, $\eta^2 = 0.01$).

10.3. Identity styles, identity dimensions, and identity functions

A primary aim of the present study was to examine how identity styles (i.e., informational, normative, and diffuse-avoidant styles) and identity dimensions (i.e., commitment, in-depth exploration, and reconsideration of commitment in the educational and interpersonal domains) are related to identity functions (i.e., structure, harmony, goals, future, and personal control). To examine these links, we first computed bivariate correlations. Findings regarding identity styles and identity functions (Table 2) indicated that, as hypothesized, identity functions were positively related to the informational and normative styles, whereas they were negatively linked to the diffuse-avoidant style. Only the association between normative style and personal control was found to be non-significant. Furthermore, results on identity dimensions and identity functions suggested that, in the educational domain, commitment and in-depth exploration were positively related to all the identity functions, whereas reconsideration of commitment was negatively linked to them. Similarly, in the interpersonal domain, commitment was positively linked to all the identity functions, in-depth exploration was positively correlated to harmony, goals, and future, and reconsideration of commitment was negatively linked to all the identity functions, expect for the association with future that was not significant.

Given that identity styles and identity dimensions were interrelated to examine unique associations between the styles, the dimensions, and the identity functions, we tested a full structural equation model. Thus, we included in the measurement model described above regression paths from identity styles and dimensions to identity functions. This approach allowed us to investigate how each style and dimension is related to each function, controlling for the other styles and dimensions. Results (Table 3) indicated that identity styles and dimensions explained large portions of variance in all of the identity functions. After controlling for interrelations among styles, among dimensions, and between styles and dimensions, some results that were significant at the bivariate level were not significant at the multivariate level. Specifically, significant paths indicated that the informational style was strongly and positively related only to personal control; the normative style was positively associated with all the identity functions except for personal control, with which it was moderately and negatively related; and the diffuse-avoidant style was negatively related to all the identity functions, except harmony, which was negatively related
to reconsideration of commitment. Finally, associations between interpersonal identity dimensions and identity functions indicated that commitment was positively related to harmony and future, and reconsideration of commitment was negatively related to harmony, future, and personal control.

10.4. Identity statuses and identity functions

The final aim of the present study was to examine whether identity statuses obtained from the combination of commitment, in-depth exploration, and reconsideration of commitment differed in terms of identity functions. To examine this, we first classified participants into identity statuses using cluster analysis, an empirically based method of classification. Following Gore’s (2000) procedure, we first performed a hierarchical cluster analysis on the standardized identity dimensions scores using Ward’s method and based on squared Euclidian distances. We compared different cluster solutions to determine whether the five-cluster solution extracted in previous studies conducted with Dutch (Crocetti et al., 2008a) as well as Italian (Crocetti et al., 2011; Crocetti, Schwartz et al., 2012) samples could also be extracted in this sample. Various cluster solutions were compared 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).

Table 1
Mean scores (and standard deviations) of identity styles, dimensions, and functions by gender and age.

<table>
<thead>
<tr>
<th></th>
<th>Gender differences</th>
<th>Age differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males n = 457</td>
<td>Females n = 744</td>
</tr>
<tr>
<td>Identity styles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informational</td>
<td>3.27 (0.53)</td>
<td>3.29 (0.43)</td>
</tr>
<tr>
<td>Normative</td>
<td>3.11 (0.56)</td>
<td>3.10 (0.50)</td>
</tr>
<tr>
<td>Diffuse-avoidant</td>
<td>2.76 (0.57)</td>
<td>2.63 (0.60)</td>
</tr>
<tr>
<td>Identity dimensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational identity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>3.22 (0.77)</td>
<td>3.20 (0.72)</td>
</tr>
<tr>
<td>Exploration</td>
<td>3.32 (0.08)</td>
<td>3.47 (0.02)</td>
</tr>
<tr>
<td>Reconsideration</td>
<td>2.74 (0.92)</td>
<td>2.61 (0.95)</td>
</tr>
<tr>
<td>Interpersonal identity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>3.27 (0.85)</td>
<td>3.43 (0.83)</td>
</tr>
<tr>
<td>Exploration</td>
<td>3.28 (0.09)</td>
<td>3.39 (0.72)</td>
</tr>
<tr>
<td>Reconsideration</td>
<td>2.07 (0.95)</td>
<td>2.09 (1.00)</td>
</tr>
<tr>
<td>Identity functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>3.56 (0.75)</td>
<td>3.53 (0.71)</td>
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<tr>
<td>Harmony</td>
<td>3.73 (0.79)</td>
<td>3.81 (0.67)</td>
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<tr>
<td>Goals</td>
<td>3.74 (0.75)</td>
<td>3.82 (0.73)</td>
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<td>Future</td>
<td>3.31 (0.85)</td>
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<tr>
<td>Personal control</td>
<td>3.66 (0.70)</td>
<td>3.66 (0.69)</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>p</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>**P&lt;0.01.</td>
<td>***P&lt;0.001.</td>
<td>***P&lt;0.001.</td>
</tr>
</tbody>
</table>

Table 2
Correlations between identity styles, dimensions, and functions.

Les corrélations entre les styles, dimensions et fonctions d’identité.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
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<tr>
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<td>0.21***</td>
<td>0.08***</td>
<td>-0.12***</td>
<td>0.16***</td>
<td>0.05</td>
<td>-0.09***</td>
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<tr>
<td>Harmony</td>
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<td>0.22***</td>
<td>-0.23***</td>
<td>0.22***</td>
<td>0.21***</td>
<td>-0.24***</td>
<td>0.22***</td>
<td>0.14***</td>
<td>-0.23***</td>
<td>0.47***</td>
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<tr>
<td>Goals</td>
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<td>0.24***</td>
<td>0.24***</td>
<td>-0.16***</td>
<td>0.16***</td>
<td>0.09***</td>
<td>-0.17***</td>
<td>0.39***</td>
<td>0.52***</td>
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</tr>
<tr>
<td>Future</td>
<td>0.15***</td>
<td>0.23***</td>
<td>-0.17***</td>
<td>0.38***</td>
<td>0.23***</td>
<td>-0.11***</td>
<td>0.16***</td>
<td>0.09***</td>
<td>0.02***</td>
<td>0.34***</td>
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<td>-0.20***</td>
<td>0.18***</td>
<td>0.20***</td>
<td>-0.18***</td>
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<td>0.44***</td>
<td>0.49***</td>
<td>0.31***</td>
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</table>

n=1158.

*P<0.05.

**P<0.01.

***P<0.001.
Table 3
Standardized betas and portion of explained variance for associations between styles, dimensions and identity functions.

<table>
<thead>
<tr>
<th>Identity functions</th>
<th>Structure</th>
<th>Harmony</th>
<th>Goals</th>
<th>Future</th>
<th>Personal control</th>
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<td><strong>Identity styles</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal</td>
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<td>−0.00</td>
<td>0.05</td>
<td>−0.08</td>
<td>0.45***</td>
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<tr>
<td>Normative</td>
<td>0.29*</td>
<td>0.29**</td>
<td>0.24**</td>
<td>0.30**</td>
<td>−0.18*</td>
</tr>
<tr>
<td>Diffuse-avoidant</td>
<td>−0.23***</td>
<td>−0.26***</td>
<td>−0.36***</td>
<td>−0.37***</td>
<td>−0.07</td>
</tr>
<tr>
<td><strong>Identity dimensions</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Educational identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>0.23*</td>
<td>0.02</td>
<td>0.13</td>
<td>0.38**</td>
<td>0.20*</td>
</tr>
<tr>
<td>In-depth exploration</td>
<td>−0.16</td>
<td>0.09</td>
<td>0.10</td>
<td>0.02</td>
<td>−0.00</td>
</tr>
<tr>
<td>Recomposition of commitment</td>
<td>−0.09</td>
<td>−0.12*</td>
<td>−0.00</td>
<td>−0.01</td>
<td>−0.03</td>
</tr>
<tr>
<td>Interpersonal identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>0.11</td>
<td>0.12*</td>
<td>0.04</td>
<td>0.15*</td>
<td>−0.00</td>
</tr>
<tr>
<td>In-depth exploration</td>
<td>0.09</td>
<td>0.07</td>
<td>0.03</td>
<td>−0.04</td>
<td>0.01</td>
</tr>
<tr>
<td>Recomposition of commitment</td>
<td>0.05</td>
<td>−0.12*</td>
<td>−0.07</td>
<td>−0.17</td>
<td>−0.23***</td>
</tr>
<tr>
<td><strong>Total $R^2$</strong></td>
<td>0.24***</td>
<td>0.35***</td>
<td>0.37***</td>
<td>0.47***</td>
<td>0.39***</td>
</tr>
</tbody>
</table>

n = 1158.

* P < 0.05.

** P < 0.01.

*** P < 0.001.

doing the variance in each of the identity factors). The same procedure was applied for the educational and interpersonal identity domains.

Findings indicated that in both educational and interpersonal identity domains the five-cluster solution was the most acceptable. In fact, simpler solutions with smaller numbers of clusters failed to extract meaningful identity statuses, and in each case, less than 50% of variance in at least one of the identity dimensions was explained by the cluster solution. Solutions with six or more clusters extracted clusters that represented slight variations of other clusters — and thus these solutions were not parsimonious. We therefore retained a five-cluster solution in both identity domains. In the second step, the initial cluster centers of the five-cluster solution were used as non-random starting points in an iterative k-means clustering procedure — as a way of determining the membership and profiles of the five clusters.

Findings indicated that the five-cluster solution that emerged in our sample for both the educational and interpersonal dimensions replicated the solution found in previous studies (Crocetti et al., 2008a; Crocetti, Schwartz et al., 2012). Specifically, in the educational domain, 19.5% of participants were classified into the achieved status; 16.7% into the early closure status; 19.9% into the moratorium status; 21.8% into the searching moratorium status; and 22% into the diffusion status (this cluster solution explained 54%, 62%, and 62% of the variance in commitment, in-depth exploration, and recombination of commitment, respectively). In the interpersonal domain, 22.2% of participants were classified into the achieved status, 21.1% into the early closure status; 15.4% into the moratorium status, 27% into the searching moratorium status, and 14.3% into the diffusion status (this cluster solution explained 59%, 57%, and 71% of the variance in commitment, in-depth exploration, and recombination of commitment, respectively).

We first conducted descriptive analyses to identify the demographic correlates of the identity status clusters. We performed two chi-square tests to test for gender and age differences in the identity status distribution. Findings indicated significant gender and age group differences both in the educational (gender: $\chi^2 (4, n = 1158) = 10.76, P < 0.05$, Cramér's $V = 0.10$; age: $\chi^2 (4, n = 1158) = 133.20, P < 0.001$, Cramér's $V = 0.34$) and interpersonal (gender: $\chi^2 (4, n = 1158) = 15.99, P < 0.01$, Cramér's $V = 0.12$; age: $\chi^2 (4, n = 1158) = 18.68, P < 0.001$, Cramér's $V = 0.13$) domains. As shown in Table 4, comparisons of observed and expected values revealed that main differences occurred between adolescents and emerging adults in educational identity. Indeed, in this domain, adolescents were overrepresented in the statuses of moratorium and searching moratorium and were underrepresented in the statuses of achievement and diffusion, whereas emerging adults were overrepresented in the status of achievement and underrepresented in the status of moratorium. Further age differences were detected in interpersonal identity. In this case, adolescents were more likely to be in the status of searching moratorium than emerging adults. Concerning gender differences, males were more likely to be in the status of diffusion than were females.

To address the final aim of our study, we performed MANCO- VAs on identity functions scores, with identity statuses (i.e., in the educational and interpersonal domains) as the independent variable, and gender and age group as covariates. At the multivariate level, results indicated significant effects of identity statuses in both educational, Wilks’ $\lambda = 0.83$; $F (20, 3812) = 11.34, P < 0.001$, $\eta^2 = 0.05$, and interpersonal, Wilks’ $\lambda = 0.89$; $F (20, 3812) = 7.01, P < 0.001$, $\eta^2 = 0.03$ domains. Follow-up univariate analyses and post hoc comparisons conducted using Tukey’s Honestly Significant Difference (HSD) tests are reported in Table 5.

For the educational domain of identity statuses, we found that participants in the achieved and early closed statuses reported higher scores on identity structure compared to their peers in the searching moratorium, moratorium, and diffused statuses. On identity harmony, youth in the achieved and early closed statuses reported the highest levels, those in the searching moratorium and diffused statuses reported intermediate levels, and those in the moratorium status scored lowest. On identity goals, participants in the achieved and searching moratorium statuses reported the highest scores, those in the early closed and diffused groups reported intermediate scores, and those in the moratorium status scored lowest. Post hoc results on future orientation indicated a highly differentiated pattern, with achieved individuals scoring highest, followed in sequence by early closed and searching moratorium, diffused, and finally moratorium statuses. With regard to personal control, youth in the achieved status scored highest, whereas those in the moratorium status scored lowest, with adolescents in early closure, searching moratorium, and diffused statuses occupying intermediate positions.

Regarding interpersonal identity statuses, we found that on identity structure, participants in the achieved and early closed statuses scored higher than those in the diffused status. On identity
Table 4
Percentages of participants in the different identity statuses by gender and age.
Pourcentages de participants pour différents statuts d’identité selon leur sexe et âge.

<table>
<thead>
<tr>
<th>Educational identity</th>
<th>Achievement</th>
<th>Early closure</th>
<th>Searching moratorium</th>
<th>Moratorium</th>
<th>Diffusion</th>
</tr>
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<tbody>
<tr>
<td>Gender groups</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Males</td>
<td>16.6%</td>
<td>18.4%</td>
<td>23%</td>
<td>23%</td>
<td>19.1%</td>
</tr>
<tr>
<td>Females</td>
<td>21.3%</td>
<td>15.6%</td>
<td>21.2%</td>
<td>18.1%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Age groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescents</td>
<td>7.2% (–)</td>
<td>14.1%</td>
<td>27.8% (+)</td>
<td>35% (+)</td>
<td>15.9% (–)</td>
</tr>
<tr>
<td>Emerging adults</td>
<td>25.7% (+)</td>
<td>17.9%</td>
<td>18.9%</td>
<td>12.4% (–)</td>
<td>25.1%</td>
</tr>
<tr>
<td>Interpersonal identity</td>
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</tr>
<tr>
<td>Gender groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>19.1%</td>
<td>20.5%</td>
<td>24.8%</td>
<td>16.6%</td>
<td>19.1% (+)</td>
</tr>
<tr>
<td>Females</td>
<td>24.1%</td>
<td>21.4%</td>
<td>28.4%</td>
<td>14.7%</td>
<td>11.5% (–)</td>
</tr>
<tr>
<td>Age groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescents</td>
<td>18.5%</td>
<td>17.7%</td>
<td>34.4% (+)</td>
<td>14.3%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Emerging adults</td>
<td>24.1%</td>
<td>22.8%</td>
<td>23.3% (–)</td>
<td>15.6%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

In each row, the total is 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.

harmony, youth in the achieved status reported the highest levels whereas those in the moratorium and diffused statuses scored lowest, and the other clusters reported intermediate levels. On identity goals, participants in the achieved status reported the highest scores, those in the early closed, searching moratorium, and diffused groups reported intermediate scores, and those in the moratorium status scored lowest. Results for future orientation indicated that youth in the diffused status scored lower than their counterparts in any other identity status. With regard to personal control, youth in the achieved and early closed statuses scored highest, whereas those in the moratorium status scored lowest, with adolescents in searching moratorium and diffused statuses occupying intermediate positions.

11. Discussion

The present study was designed to shed light on associations among identity conceptualizations that have expanded Erikson’s (1950, 1968) and Marcia’s (1966) classic theoretical perspectives. Specifically, we have examined, in a large sample of Italian late adolescents and emerging adults, links among identity styles, dimensions, statuses, and functions. Given that identity functions represent outcomes of the identity development process, we sought to map the associations between these outcomes and the dimensions underlying identity development.

11.1. Berzonsky’s identity style model and identity functions

Findings obtained in the present study through correlational analyses confirmed our hypotheses and are consistent with unpublished evidence obtained with North American samples (Serafini, 2008) by demonstrating that the informational and normative styles were positively associated with the identity functions, whereas the diffuse-avoidant style was negatively related to all five functions. The only exception to this pattern was the non-significant association between the normative style and personal control. Briefly, these results suggest that both the informational style, through an active evaluation of various alternatives, and the normative style, by means of internalization of values, beliefs, and orientations from reference groups and significant others, promote development of a firm identity. On the other hand, the diffuse-avoidant style, typical of youth who “put off” identity decisions as long as they can, may create a lack of personal control, structure, harmony, goals to strive for, and future orientation (Berzonsky, 1989, 2003, 2004, 2011).

Additionally, when unique associations between styles and functions were examined (i.e., after controlling for the effects of other identity styles and identity dimensions), results indicated that the informational style was positively related to personal control whereas the normative style was negatively associated with it. This result is not surprising given that individuals with a normative style tend to internalize the goals, values, and standards of

Table 5
Mean scores (and standard deviations) of identity functions by identity statuses.
Scores moyens et déviations standard pour fonctions selon statuts d'identité.

<table>
<thead>
<tr>
<th>Identity statuses</th>
<th>Achievement</th>
<th>Early closure</th>
<th>Searching moratorium</th>
<th>Moratorium</th>
<th>Diffusion</th>
<th>F (4, 1157)</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>3.69 (0.67)</td>
<td>3.69 (0.68)</td>
<td>3.50 (0.69)</td>
<td>3.39 (0.77)</td>
<td>3.46 (0.74)</td>
<td>8.37***</td>
<td>0.03</td>
</tr>
<tr>
<td>Harmony</td>
<td>4.10 (0.59)</td>
<td>3.96 (0.63)</td>
<td>3.68 (0.68)</td>
<td>3.44 (0.80)</td>
<td>3.78 (0.69)</td>
<td>31.67***</td>
<td>0.10</td>
</tr>
<tr>
<td>Goals</td>
<td>4.11 (0.64)</td>
<td>3.90 (0.65)</td>
<td>3.77 (0.73)</td>
<td>3.47 (0.80)</td>
<td>3.75 (0.70)</td>
<td>24.29***</td>
<td>0.08</td>
</tr>
<tr>
<td>Future</td>
<td>3.70 (0.70)</td>
<td>3.49 (0.82)</td>
<td>3.46 (0.81)</td>
<td>2.94 (0.88)</td>
<td>3.16 (0.79)</td>
<td>31.77***</td>
<td>0.10</td>
</tr>
<tr>
<td>Personal control</td>
<td>3.84 (0.57)</td>
<td>3.78-7.5 (0.55)</td>
<td>3.62 (0.69)</td>
<td>3.37 (0.81)</td>
<td>3.70 (0.69)</td>
<td>16.37***</td>
<td>0.05</td>
</tr>
<tr>
<td>Interpersonal identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>3.63 (0.68)</td>
<td>3.63 (0.68)</td>
<td>3.47 (0.66)</td>
<td>3.52 (0.73)</td>
<td>3.42 (0.90)</td>
<td>4.15***</td>
<td>0.01</td>
</tr>
<tr>
<td>Harmony</td>
<td>3.99 (0.61)</td>
<td>3.91 (0.61)</td>
<td>3.74 (0.71)</td>
<td>3.56 (0.75)</td>
<td>3.58 (0.87)</td>
<td>15.95***</td>
<td>0.05</td>
</tr>
<tr>
<td>Goals</td>
<td>3.99 (0.71)</td>
<td>3.85 (0.71)</td>
<td>3.76 (0.68)</td>
<td>3.58 (0.75)</td>
<td>3.70 (0.83)</td>
<td>9.92***</td>
<td>0.03</td>
</tr>
<tr>
<td>Future</td>
<td>3.51 (0.83)</td>
<td>3.34 (0.81)</td>
<td>3.36 (0.82)</td>
<td>3.37 (0.76)</td>
<td>3.01 (0.96)</td>
<td>9.17***</td>
<td>0.03</td>
</tr>
<tr>
<td>Personal control</td>
<td>3.81 (0.63)</td>
<td>3.81 (0.61)</td>
<td>3.53 (0.70)</td>
<td>3.46 (0.74)</td>
<td>3.65 (0.74)</td>
<td>12.28***</td>
<td>0.04</td>
</tr>
</tbody>
</table>

A cluster mean is significantly different (P<0.05) from another mean at Tukey post hoc test if they have different superscripts.

** P<0.001.
significant others and reference groups in a relatively automatic fashion (Berzonsky, 1989; Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens; 2005; Vleioras & Bosma, 2005). Apart from this, the normative style was still significantly and positively related to all the other identity functions whereas the diffuse avoidant style was negatively associated with them, as expected.

11.2. The three-factor identity model and identity functions

The present study examined, for the first time, links between identity functions and identity dimensions (i.e., commitment, in-depth exploration, and reconsideration of commitment) recently proposed by Meeus, Crocetti and colleagues (Crocetti et al., 2008b; Meeus et al., 2010). In accordance with our hypotheses, findings of correlational analyses suggested that for both the educational and interpersonal domains, identity functions were positively and significantly associated with commitment and in-depth exploration, which underpin the formation of a stable identity. Specifically, commitment indicates the extent to which people identify with relevant identity choices, and in-depth exploration refers to a thoughtful evaluation of current commitments (Meeus, 1996; Meeus et al., 1999). The interplay of commitment and in-depth exploration defines the cycle of identity maintenance: through in-depth exploration of existing commitments, youth evaluate whether their choices “fit” with their overall sense of self and, if so, they are likely to use these choices to consolidate their personal identity (Luyckx, Goossens, & Soenens, 2006). On the contrary, identity functions were negatively related to reconsideration of commitment, which represents discarding existing commitments that no longer fit with the individual’s stable identity. Specifically, reconsideration indicates the extent to which people are willing to question their identity choices and reconsider them (Crocetti et al., 2008b). Hence, reconsideration of commitment represents a source of identity disequilibrium linked to distress and instability, as demonstrated by the associations of reconsideration with lack of personality structure (i.e., low scores on the Big Five personality traits), internalizing as well as externalizing problem behaviours, and poor interpersonal relationships (Crocetti et al., 2008b; Schwartz et al., 2011).

When unique associations between dimensions and functions were examined (i.e., after controlling for the effects of identity styles and of other identity dimensions), findings highlighted a key role of educational identity commitment. In particular, educational commitment was strongly related to future orientations, suggesting that in this phase of the life span, academic decisions, such as the choice of one’s major area of study, might represent a milestone in the identity formation process (e.g., Crocetti, Scrignaro et al., 2012; Montgomery & Côté, 2003).

We further examined associations between identity statuses and identity functions. In particular, using cluster-analytic procedures including commitment, in-depth exploration, and reconsideration of commitment, findings were consistent with our expectations; five identity statuses (cf. Crocetti et al., 2008a) in both the educational and interpersonal identity domains were obtained: achievement, early closure, moratorium, searching moratorium, and diffusion. Results indicated that scores on the identity functions differed significantly across the five identity statuses, with the percentage of explained variance ranging from low (1%) to moderate (10%) (Cohen, 1988). The pattern of differences we detected was partly consistent with our hypotheses. In line with our expectations, we found that youth in the achieved status reported an optimal identity profile. On the contrary, and different from what we hypothesized, the poorest identity profile was only partly characteristic of the diffused status; rather, it was more typical of respondents in the moratorium status, especially for the educational identity domain. A more detailed discussion of these findings is provided below.

In both domains, youth in the achieved status scored the highest on identity functions. These findings are completely consistent with Erikson’s (1950, 1968) theory, which holds that young people with a consolidated sense of identity have combined and integrated relevant earlier identifications into a unique and personal mold that provides them with a sense of control and direction. On the contrary, young people in a state of identity confusion have not chosen their own commitments and, thus, they either have difficulty enacting commitments or are not interested in making them (Luyckx et al., 2005).

Moreover, individuals in the early closure status scored closest to achievers on most of the identity functions. Indeed, adolescents and emerging adults in the early closure group reported levels of structure, harmony, and personal control comparable to those displayed by achievers, in conjunction with intermediate scores on goals and future orientation in the educational domain. These findings highlight that commitment is the key element that provides a sense of structure, harmony, and control. This evidence is consistent with a previous literature that reveals that individuals in the achieved and foreclosed statuses exhibit high levels of positive adjustment (cf. Meeus et al., 1999; Luyckx et al., 2005, 2008). Thus, commitment is crucial in promoting well-being and a sense of agency (Berzonsky, 2003; Schwartz, Côté, & Arnett, 2005).

Further, participants in the classical moratorium and diffusion statuses reported the poorest identity functioning. More specifically, in the educational domain adolescents and emerging adults in the moratorium status scored lower than their diffused peers on all the identity functions, except for structure (where they scored similarly). Therefore in this domain, the moratorium status, typical of individuals who have not yet made relevant commitments but are endeavouring to find them, is characterized by high identity instability (Luyckx et al., 2008; Schwartz, Zamboanga, Weisskirch, & Rodriguez, 2009). Youth who are continuing to reconsider their academic choices may feel confused by the several choices that higher education offers (in terms of diversity of majors and specializations) and, therefore, they may struggle finding a good ‘fit’ between their interests/values/beliefs and potential area of study and career goals. Not surprisingly, the moratorium status has consistently been associated with emotional distress (see Meeus et al., 1999, for a review) and with externalizing behaviour problems (Crocetti et al., 2008b). In the interpersonal domain, the moratorium and diffused statuses scored similarly on all the identity functions, except for future (where diffused scored lowest).

Along a hypothetical continuum between achievement and early closed on one end and moratorium and diffusion on the other, individuals in the searching moratorium status occupy an intermediate position. As outlined in previous studies (Crocetti et al., 2008b; Crocetti, Schwartz et al., 2012), and as supported by the present results, the searching moratorium status is not as troublesome as the classical moratorium status. Although both the moratorium and searching moratorium statuses represent searching for potential identity commitments, individuals in the searching moratorium status are revising their existing commitments, starting their search from a secure base rooted in their current commitments, whereas those in the classical moratorium status are uncompromised.

11.3. Gender and age differences

In this study, we have also controlled for gender and age differences that can have an impact on identity (Lewis, 2003; Schwartz et al., 2006). In line with our hypotheses, small gender differences were found for the diffuse-avoidant style and for in-depth exploration in both the educational and interpersonal domains. Females scored lower on the diffuse-avoidant style and higher on exploration than males, suggesting that young women may be
undertaking more identity work. This is consistent with extant literature that has shown the diffuse-avoidant style to be more common among males (e.g., Boyd, Hunt, Kandell, & Lucas, 2003; Dunkel, Papini, & Berzonsky, 2008; Eryigit & Kerpelman, 2009; for a meta-analysis, see Bosch & Card, 2012), whereas females tend to reflect more on their commitments. Slightly gender differences were also detected on interpersonal commitment (i.e., females were more committed than males) and on interpersonal identity statuses (i.e., females were less likely than males to be in the diffused status). These findings confirm the importance attributed to interpersonal identity by females (e.g., Mees, 1996).

In accordance with our expectations, the age differences that we found suggest that more identity work was taking place in emerging adulthood than in adolescence. Specifically, emerging adults reported higher use of the informational strategy than adolescents, indicating that they are thoughtfully exploring various options before assuming adult roles (Arnett, 2000, 2004). Furthermore, in the educational domain, emerging adults exhibited higher commitment and in-depth exploration, in conjunction with lower reconsideration, than adolescents. These differences mirrored those that emerged in the distribution of identity statuses in the two age groups: adolescents were overrepresented in the statuses of moratorium and searching moratorium and were underrepresented in the statuses of achievement and diffusion; whereas, emerging adults were overrepresented in the status of achievement and underrepresented in the status of moratorium. Taken together, these cross-sectional findings are in line with longitudinal findings suggesting that individuals progressively move toward a more stable and firm identity as they mature (Klimstra et al., 2010). Furthermore, our findings add to this by highlighting age differences regarding the educational identity domain that is unique to this phase of the life span. In fact, the transition from high school to university represents a core developmental task that individuals have to face while they navigate from late adolescence to early emerging adulthood (e.g., Berzsonszy & Kuk, 2000).

11.4. Limitations and suggestions for future research

The present findings should be considered in light of some limitations. A primary limitation concerns the cross-sectional design that we used, which does not allow investigations of causality or directionality. Longitudinal studies are needed to shed light on the impact of identity styles, dimensions, and statuses on identity functions over time. Whereas identity functions have been conceptualized and studied as outcomes of identity statuses, styles, and dimensions, their role in later exploration or maintenance of commitments has not been examined. During the initial identity construction period typical of adolescence the functions serve as outcomes of identity construction, but when identity considerations continue through emerging adulthood and beyond, identity functions may impact identity development more directly. That said, in the present study emerging adults scored higher on informational style, commitment, and in-depth exploration than adolescents, who in turn reported higher reconsideration of commitment than emerging adults. How identity functions might serve to maintain commitments, foster in-depth exploration, or spur reconsideration of commitment was not directly examined. To date, the impact of identity functions on the process of identity development has not been empirically examined. Future research should consider the possible reciprocal relationship between identity functions and identity styles, statuses, and dimensions.

Another important limitation of our study concerns the inclusion only of students in the sample. Therefore, we cannot ascertain whether our findings can be generalized to late adolescents and emerging adults who are approaching the school-to-work transition. Unfortunately, these individuals still remain a “forgotten half that remains forgotten” (Arnett, 2000, p. 476).

12. Conclusion

Despite these limitations, the present results are among the first to explore the associations of identity dimensions, styles, and statuses with outcomes (functions) of identity. This is a key research direction because it emphasizes the consequences — and therefore the importance — of developing a sense of identity in adolescence and emerging adulthood. Further research might link the functions of identity to psychosocial and health outcomes to further demonstrate the importance of identity as a developmental task of adolescence and of the transition to adulthood.

In conclusion, it is worthwhile noting that the identity conceptualizations we have examined in this study are all rooted in Erikson’s (1950, 1968) theory. Nevertheless, each of them captures a specific facet of identity. In order to avoid divergences among identity conceptualizations that share the same core theoretical foundation, it is necessary to reflect on theoretical interconnections and to investigate them empirically. This is an essential step towards gaining a more comprehensive understanding of identity development. We hope that this study will inspire such a line of research. In particular, most identity research has been conducted on adolescence and emerging adulthood, which are the phases of life cycle during which identity formation represents the main developmental task (Arnett, 2000, 2004; Erikson, 1950, 1968). However, as Erikson’s (1959) psychosocial theory implies, identity continues to be a core task along the entire life span. Therefore, future researchers’ agenda should take into account examining interconnections among identity conceptualizations also in adulthood (e.g., Marcia, 2002), especially in relation to critical moments and transitional events (e.g., transition to parenthood or retirement) that stimulate a re-definition of personal identity (e.g., Kroger & Green, 1996).

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

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References


