

# Emerging Adulthood

<http://eax.sagepub.com/>

---

## **Identity in Emerging Adulthood: Reviewing the Field and Looking Forward**

Seth J. Schwartz, Byron L. Zamboanga, Koen Luyckx, Alan Meca and Rachel A. Ritchie

*Emerging Adulthood* 2013 1: 96 originally published online 26 March 2013

DOI: 10.1177/2167696813479781

The online version of this article can be found at:

<http://eax.sagepub.com/content/1/2/96>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



[Society for the Study of Emerging Adulthood](#)

**Additional services and information for *Emerging Adulthood* can be found at:**

**Email Alerts:** <http://eax.sagepub.com/cgi/alerts>

**Subscriptions:** <http://eax.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

>> [Version of Record](#) - May 15, 2013

[OnlineFirst Version of Record](#) - Mar 26, 2013

[What is This?](#)

# Identity in Emerging Adulthood: Reviewing the Field and Looking Forward

Seth J. Schwartz<sup>1</sup>, Byron L. Zamboanga<sup>2</sup>, Koen Luyckx<sup>3</sup>, Alan Meca<sup>4</sup>, and Rachel A. Ritchie<sup>4</sup>

Emerging Adulthood  
1(2) 96-113  
© 2013 Society for the  
Study of Emerging Adulthood  
and SAGE Publications  
Reprints and permission:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/2167696813479781  
ea.sagepub.com



## Abstract

The present article presents a review of identity status-based theory and research with adolescents and emerging adults, with some coverage of related approaches such as narrative identity and identity style. In the first section, we review Erikson's theory of identity and early identity status research examining differences in personality and cognitive variables across statuses. We then review two contemporary identity models that extend identity status theory and explicitly frame identity development as a dynamic and iterative process. We also review work that has focused on specific domains of identity. The second section of the article discusses mental and physical health correlates of identity processes and statuses. The article concludes with recommendations for future identity research with adolescent and emerging adult populations.

## Keywords

identity, emerging adulthood, adolescence, statuses, exploration, commitment

Identity is a fundamental psychosocial task for young people. Beginning in their early teens, adolescents start to ask questions such as “Who am I?” “What am I doing in my life?” “What kind of relationships do I want?” “What kind of work do I want to do?” and “What are my beliefs?” (Archer, 1982). The consideration of alternative possibilities often coincides with the advent of formal operational thought during adolescence (Krettenauer, 2005). As young people develop the ability to consider an abstract idea such as who and what they could be, they may begin to imagine new and different possibilities for themselves.

Accordingly, the purpose of this article is to review what is known about identity in young people—with particular attention to work conducted since 2000. We begin with an overview of what identity is (from a developmental perspective), how it functions, and how the task of developing a sense of identity has changed in the past 40–50 years due to technological advances and associated social changes. We attend to research and theory that is rooted in the pioneering work of Erikson (1950), who was one of the first “grand theorists” to characterize identity as a fundamental task of adolescence and of the transition to adulthood. We then review a number of prominent neo-Eriksonian identity theories and some of the content domains in which identity processes operate. We focus particularly on Marcia's identity status model, which was one of the first empirical operationalizations of Erikson's work and has generated more than 45 years of theoretical and empirical work. We also review two other prominent neo-Eriksonian approaches, identity style and narrative identity. We then review research linking identity processes and domains with

psychosocial and health outcomes. Finally, we suggest future directions for identity research.

A fundamental question that has been posed is not when active consideration of identity issues begins, but rather when this first iteration of self-examination is resolved. In largely individualistic, Western contexts, the beginning of the search for a sense of self results from a combination of (a) increased mental capacities to consider multiple possibilities and (b) a social context where multiple alternatives are available and from which one or more may be selected (Bosma & Kunnen, 2001). The active consideration of identity alternatives is assumed to subside once one has enacted firm adult commitments (however “adult commitments” are defined in the society where one lives) and has entered into adult roles such as permanent partnership, gainful employment, and parenthood (Luyckx, Schwartz, Goossens, & Pollock, 2008). Of course, identity issues are often reconsidered later in life—the “midlife

<sup>1</sup> Department of Epidemiology and Public Health, Leonard M. Miller School of Medicine, University of Miami, Miami, FL, USA

<sup>2</sup> Smith College, Hadley, MA, USA

<sup>3</sup> Katholieke Universiteit Leuven, Belgium

<sup>4</sup> Florida International University, Miami, FL, USA

## Corresponding Author:

Seth J. Schwartz, PhD, Department of Epidemiology and Public Health, Leonard M. Miller School of Medicine, University of Miami, 1425 N.W. 10th Avenue, Suite 321, Miami, FL 33136, USA.  
Email: sschwartz@med.miami.edu

crisis” can take the form of revisiting one’s identity commitments that were enacted earlier but may no longer fit with one’s current life situation or sense of self (Freund & Ritter, 2009; Sneed, Whitbourne, Schwartz, & Huang, 2012)—but our focus here is on identity work in late adolescence and emerging adulthood.

Erikson (1950) proposed adolescence as the time when consideration of identity issues would be most prominent. In the mid-20th century, when most of Erikson’s writings were published, the majority of Americans married and entered the workforce almost immediately upon completing high school (Cherlin, 2010; National Center for Education Statistics, 2010). However, as many entry-level jobs were mechanized, outsourced, or otherwise made obsolete, and as the U.S. economy began to transition from industrial to technological, many of the available jobs began to require postsecondary education. As a result, young Americans flocked to colleges and universities following their high school graduation. In 1959, approximately 2.4 million American students attended college or university full time; by 2010, that number had jumped to 12.7 million (National Center on Education Statistics, 2010). This 430% increase is nearly six times the 72% increase in the total U.S. population during that same time span (U.S. Census Bureau, 2011). Similar trends have also occurred in other Western countries (e.g., Canada, Australia; Fussell, Gauthier, & Evans, 2007).

Moreover, as the economy transitioned from industrial to technological, the range of potential career choices increased exponentially. Rather than deciding on a career in high school, young people began to experiment with various career alternatives through selecting and changing college majors (Côté & Allaha, 1994). Indeed, research indicates that changing academic majors is part of the process of sorting through potential career alternatives (Malgwi, Howe, & Burnaby, 2005).

Similar changes have occurred in other life domains, such as romantic relationships, religious faith, political participation, and gender roles. Concerning romantic relationships, many young people are choosing to stay single or to cohabit with a partner instead of getting married (Dykstra & Poortman, 2010; Wiik, 2009). In the area of religion and spirituality, young people are less likely to participate in organized faith activities, such as attending church (Uecker, Regnerus, & Vaaler, 2007), and more likely to engage in individualized spiritual activities such as praying or meditating (Barry, Nelson, Davarya, & Urry, 2010). In areas such as gender and sexuality, women now represent the majority of students at most U.S. universities (National Center of Education Statistics, 2010). Moreover, nontraditional sexual identities and orientations have become increasingly accepted since the mid to late 1990s (Savin-Williams, 2011). So the ways in which identity work is undertaken in many content domains have been rapidly changing during the close of the 20th century and the beginning of the 21st century.

A by-product of the move toward a technologically based economy and of increased college attendance was a lengthening of the transition between school and work, between living

with one’s nuclear family and establishing one’s family of procreation or choice, and between the end of dependency on parents and the assumption of permanent adult roles (Côté, 2000). Young people were spending more time “in between” adolescence and adulthood—a time when they were more autonomous than they had been during adolescence but were still at least somewhat financially dependent on their parents (Arnett, 1998). Further, young people in this phase of life were no longer bound to the structured high school schedule, but for the most part, they had yet to enter the world of full-time work—suggesting that young people in their late teens and early 20s often had a great deal of free time in which they could try out potential adult relationships, experiment with substances, philosophize about various belief systems, and investigate and think about career possibilities (Arnett, 2005, 2007a).

Arnett (2000) has referred to this “in-between” period as *emerging adulthood*. Likely as a result of the remarkable amorphousness that characterizes emerging adulthood, the majority of identity exploration and commitment in the late 20th century and the early 21st century has extended into this developmental period rather than being limited to adolescence (Schwartz, Côté, & Arnett, 2005). Indeed, as enumerated by Arnett (2007b), the distinctive features of emerging adulthood include a focus on oneself, a feeling of being in between adolescence and adulthood, instability, and openness to a wide variety of possibilities. These features encourage, and provide time and space for, consideration of identity alternatives in areas such as career, relationships, sexuality, philosophy of life, and religion and spirituality (Schwartz, Donnellan, Ravert, Luyckx, & Zamboanga, 2013).

### *Models of Identity Development in Emerging Adulthood*

A number of theoretical models have been introduced to describe and help explain the process of identity development from late adolescence through emerging adulthood. Although a full review of identity models is beyond the scope of this review (see Schwartz, Luyckx, & Vignoles, 2011, for a more comprehensive review of identity perspectives), it is worth examining some of the models that are developmentally focused and that have been applied to emerging adulthood. The models that we review here are grounded, to varying extents, in Erikson’s (1950) life span psychosocial theory, of which identity was a central theme. Erikson posited identity as a dynamic interplay between identity synthesis and identity confusion. *Identity synthesis* represents a coherent and internally consistent sense of self over time and across situations (Dunkel, 2005), whereas *identity confusion* represents a fragmented or piecemeal sense of self that does not support self-directed decision making.

Identity synthesis and confusion represent only a small part of Erikson’s theorizing on identity. Indeed, several of Erikson’s books—including his case studies of Mohandas Gandhi (Erikson, 1969) and Martin Luther (Erikson, 1958)—focus strongly on identity issues including (but not limited to) synthesis and

confusion. Erikson's writing is often abstract and clinically oriented rather than concrete and empirically testable, and he left to others the task of operationalizing many of his concepts for empirical research (Côté, 1993).

In this article, we review three primary models that have their roots in Erikson's work. The majority of the present article is devoted to the identity status perspective (Marcia, 1966), recent extensions of identity status theory, and related research conducted within specific identity domains (e.g., politics, religion/spirituality, and gender/sexuality). We also review work conducted within (a) the identity style perspective (Berzonsky, 1989), which began as an extension of identity status but has now established its own literature and within (b) narrative approaches to identity (e.g., Bauer & McAdams, 2010; McAdams, 2013).

### The Identity Status Model

Marcia's (1966) identity status model was among the first empirical operationalizations of Erikson's work and, in the more than 45 years since its introduction, the identity status model has inspired nearly 1,000 theoretical and empirical publications (see Kroger & Marcia, 2011). Drawing on Erikson's work, Marcia proposed *exploration* and *commitment* as the defining dimensions of identity. Exploration refers to sorting through various potential identity alternatives, whereas commitment represents selecting one or more alternatives to which to adhere. Marcia divided exploration and commitment into "present" and "absent" levels, and he crossed the exploration and commitment dimensions to create four identity status categories. *Achievement* represents a set of commitments enacted following a period of exploration. *Moratorium* represents a state of active exploration with few commitments. *Foreclosure* represents a set of commitments enacted without prior exploration. *Diffusion* represents an absence of commitments coupled with a lack of interest in exploration. Each of these statuses is associated with a distinct set of personality characteristics: achievement with balanced thinking and mature interpersonal relationships (Beyers & Seiffge-Krenke, 2010; Krettenauer, 2005); moratorium with openness and curiosity (Luyckx, Goossens, & Soenens, 2006) but also with symptoms of anxiety, depression, and poor well-being (Schwartz, Zamboanga, Weisskirch, & Rodriguez, 2009); foreclosure with self-satisfaction and low levels of internalizing symptoms (Schwartz, Beyers, et al., 2011); and diffusion with low self-esteem and with an absence of self-direction and agency (Schwartz et al., 2005).

Much of the early work using the identity status model focused on comparing and contrasting the four identity status categories in terms of personality, adjustment, and developmental variables such as attachment, perspective taking, and moral reasoning (Kroger & Marcia, 2011). Since the late 1980s and early 1990s, the focus of identity status-based research has been primarily on correlates of the component processes underlying identity status—namely exploration and commitment (Berzonsky & Adams, 1999; Crocetti, Rubini, &

Meeus, 2008; Luyckx, Goossens, Soenens, & Beyers, 2006). For example, research has found that exploration is associated with identity confusion, symptoms of anxiety and depression, and other forms of maladjustment (Schwartz et al., 2009), whereas commitment is associated with satisfaction and security with one's life (Luyckx, Schwartz, Goossens, & Pollock, 2008).

*Criticisms of the Identity Status Model.* Although the identity status model has been popular, it has also been subject to a great deal of criticism. The almost exclusive focus on identity status categories was criticized as misrepresenting Erikson's (1950) theory of identity (Côté & Levine, 1988). Indeed, although Erikson spoke of identity as something that is created through transactions between individuals and their social contexts, the identity status model pays little attention to context and appears to frame the identity development process as a set of individual choices. For example, identity status theorists and researchers have often adopted a pejorative view of foreclosure (e.g., Kroger & Marcia, 2011)—despite the appropriateness of foreclosure in some social and cultural contexts. Foreclosure may be the most "appropriate" identity configuration in cultural and interpersonal contexts that emphasize conformity, hierarchical relationships, and interdependence (Bosma & Kunnen, 2001; Dwaury, 2002). Indeed, consideration of various identity alternatives—a hallmark of "successful" identity development in many Western societies—may occur less frequently in non-Western societies (Berman, Yu, Schwartz, Teo, & Mochizuki, 2011). Identity development in these societies is more likely to involve imitation and internalization of values and beliefs from parents and other authority figures (Cheng & Berman, 2012)—a process that matches the definition of foreclosure.

A further criticism of the identity status perspective is that it is too simplistic to capture the nuances of identity development. Exploration was originally cast as the "work" of identity development, with commitment framed as the outcome of that process (Grotevant, 1987). A logical extension of this idea is that young people explore among a range of options, select one or more of these options to which to commit, and then the identity development process is complete. Although Marcia and others (e.g., Kroger, 1996; Stephen, Fraser, & Marcia, 1992) have explicitly noted otherwise, a common assumption within the identity status model has been that identity is somehow "finalized" in early adulthood (van Hoof, 1999)—and such an assumption directly contradicts Erikson's writings. Indeed, many of the content domains in which identity development has been studied—such as career choice and dating relationship preferences—refer specifically to activities undertaken during the emerging adult age period, and a sharp decline in identity activity within these domains would be expected upon taking on permanent adult roles.

*Expanded Identity Status Models.* Schwartz (2001, 2005) reframed these criticisms as challenges for the identity research community. He called for conceptualization of a greater range of identity processes and for in-depth research examining the

ways in which identity operates across adolescence and emerging adulthood. In response, two expanded identity models—the dual-cycle model (Luyckx, Goossens, Soenens, & Beyers, 2006) and the certainty–uncertainty model (Crocetti et al., 2008)—were introduced. The dual-cycle model unpacks identity exploration into two separate processes (exploration in breadth and exploration in depth) and unpacks commitment into two separate processes (commitment making and identification with commitment). Exploration in breadth refers to the process proposed by Marcia, whereas exploration in depth refers to thinking about a commitment that one has already put into place (i.e., evaluating the extent to which that commitment fits with one’s overall sense of self). Commitment making refers to the act of committing to a set of goals, values, and beliefs (i.e., making a decision as to what direction to pursue), whereas identification with commitment refers to embracing one’s commitments and integrating them into one’s sense of self (i.e., deriving self-esteem from one’s goals, values, and beliefs). A fifth process, ruminative exploration, was added to the model somewhat later (Luyckx, Schwartz, Berzonsky, et al., 2008) and represents becoming “stuck” in the identity development process due at least in part to unrealistic expectations, maladaptive perfectionism, and fear of making the “wrong” choice (Luyckx, Soenens, Goossens, Beckx, & Wouters, 2008). Exploration in breadth and commitment making represent the way in which commitments are *formed*, whereas exploration in depth and identification with commitment represent the way in which commitments are *evaluated*. Commitments that are judged to be inadequate when explored in depth will likely not be identified with, leading to another round of exploration in breadth. Further, even those commitments that have been identified with may be explored in depth again at a later time when circumstances change—such as when one gets married or divorced, loses a job, or experiences an unexpected setback (Luyckx, Schwartz, Goossens, Beyers, & Missotten, 2011). So the dual-cycle model explicitly acknowledges exploration and commitment as processes, while also delineating multiple dimensions of exploration and multiple dimensions of commitment. From this perspective, identity is a fluid and dynamic process—much as Erikson described it.

The certainty–uncertainty model was introduced by Crocetti, Meeus, and their colleagues (e.g., Crocetti, Rubini, & Meeus, 2008; Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010). This model includes three processes—commitment, exploration in depth, and reconsideration of commitment. Commitment refers to a combination of the commitment making and identification with commitment dimensions from Luyckx et al.’s model, and exploration in depth refers to the corresponding dimension from Luyckx et al.’s model. Reconsideration of commitment refers to a willingness to entertain the prospect of replacing one’s current commitments with new ones. Reconsideration is similar to exploration in breadth, but it proceeds from a somewhat different set of assumptions. Exploration in breadth can take place when the person currently maintains few or no commitments, whereas reconsideration assumes that the person has commitments that may or may

not be replaced. Like Erikson (1950), Meeus (1996) maintains that most individuals enter adolescence with at least some commitments internalized from parents and that these commitments will be explored in depth and will then be either retained or reconsidered.

Within the Meeus model, commitment and reconsideration represent certainty and uncertainty, respectively, in the process of identity development. Not surprisingly, commitment is associated with emotional security and a coherent sense of self, whereas reconsideration is associated with internalizing symptoms and a fragmented sense of self (Crocetti, Rubini, & Meeus, 2008; Schwartz, Klimstra, et al., 2011). Findings for exploration in depth have been somewhat different across the countries where the Luyckx and Meeus models were validated: exploration in depth has been found to be linked with symptoms of anxiety and depression more strongly in Italy than in either Belgium or the Netherlands (Crocetti, Schwartz, Klimstra, & Meeus, 2010; Luyckx, Berzonsky, et al., 2008). These differential patterns may be due, at least in part, to the more amorphous and extended transition to adulthood in Italy—often lasting beyond age 30—compared to other European countries (see Crocetti, Rabaglietti, & Sica, 2012, for a more extended discussion).

The Luyckx and Meeus models, inspired in part by Schwartz’s (2001) reframing of the criticisms of the identity status approach, have also been used to generate empirical support for the identity status perspective. This support has taken two forms. First, using cluster analyses and cross-sectional data, the processes proposed by Luyckx and by Meeus have been used to empirically extract clusters matching all of Marcia’s identity statuses (Crocetti, Rubini, Luyckx, & Meeus, 2008; Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005). Second, using empirical clustering procedures and longitudinal data, both the Luyckx and Meeus models have been used to empirically characterize the identity statuses as characterological trajectory types (Luyckx, Klimstra, Schwartz, & Duriez, in press; Meeus, van de Schoot, Keijsers, Schwartz, & Branje, 2010). In other words, for many adolescents and emerging adults, the identity statuses may represent semipermanent personality profiles that endure over time, rather than transitional states as originally hypothesized by Marcia (1966). In both the cross-sectional and longitudinal results, additional identity statuses, beyond those proposed by Marcia, were extracted. Specifically, Luyckx, Goossens, Soenens, Beyers, and Vansteenkiste (2005) found two types of diffusion, and Meeus, van de Schoot, Keijsers, Schwartz, and Branje (2010) found two types of moratorium. Luyckx et al. differentiated between troubled or diffused diffusion (where the person attempts to explore but worry and rumination soon take over) and carefree diffusion (where the person is unconcerned with identity issues). Meeus et al. differentiated between classical moratorium—the uncommitted status in which exploration is often associated with symptoms of anxiety, depression, and poor well-being—and searching moratorium, where the person considers new potential identity commitments without discarding her or his present commitments.



These new statuses may serve to expand the compatibility of identity status with Erikson's work. For example, troubled diffusion is more similar to Erikson's concept of identity confusion than carefree diffusion is (Schwartz, Beyers, et al., 2011). In other words, struggling to develop a sense of self is quite different from being uninterested in identity development. Indeed, as Erikson (1968) argued, a lack of interest in identity may represent a *different kind* of identity confusion than is captured by a struggle to sustain proactive identity exploration. Further, although the commonality between moratorium and diffusion (e.g., similarly high levels of anxiety and depressive symptoms) had led some writers (e.g., Côté & Schwartz, 2002) to question the extent to which exploration in breadth is developmentally adaptive, the searching moratorium status provides an alternative whereby it may not be necessary to discard one's current commitments before considering new ones. One might assume, therefore, that it may be possible to develop a self-directed sense of identity without the distress associated with classical moratorium. In other words, one may commit while maintaining a sense of flexibility and openness to change.

### Identity Domains

The identity statuses, and the processes underlying them, are assumed to operate within a set of content domains such as political preference, religious affiliation, gender and sexuality, values and morality, and family relationships, among others. The identity status literature has been somewhat ambivalent regarding the extent to which identity is best operationalized as a global construct or as operating separately within each domain or set of domains. Many earlier identity status measures, such as the Ego Identity Process Questionnaire (Balistreri, Busch-Rossnagel, & Geisinger, 1995) and the Extended Objective Measure of Ego Identity Status (Bennion & Adams, 1986), explicitly sum across domains to create overall scores for identity processes. However, studies that have examined different domains separately have reached the conclusion that identity develops unevenly across domains (Goossens, 2001; Pastorino, Dunham, Kidwell, Bacho, & Lamborn, 1997). Indeed, entire literatures have emerged focusing on specific domains of identity development in adolescence and emerging adulthood. We explore some of these literatures briefly here.

**Political Preference.** Much of the developmental literature on political identity has focused on civic participation and its antecedents. Research suggests that emerging adult citizenship activities (e.g., voting, serving on juries, staying informed about important local and national issues) may be predicted by academic and social competence in adolescence (Obradović & Masten, 2007) and by connections to parents, school officials, neighbors, and other adult figures (Duke, Skay, Pettin-gell, & Borowsky, 2009). Sherrod (2008) found that adolescents' beliefs about civic responsibilities were associated with their beliefs about the types of services and freedoms to which people should be entitled. Further, citizenship, and

beliefs about civic responsibilities, in emerging adulthood is linked with prosocial community activities such as volunteering, mentoring, and helping others (Youniss & Yates, 1996). Political identity appears to be nurtured by participation in organized, community-based activities in adolescence—especially given that the benefits of political involvement are often conferred on others as well as on oneself (Youniss et al., 2003).

**Religious Orientation.** Although formal religious participation has been declining among North American and European emerging adults for more than a generation (Uecker et al., 2007), some young people have remained quite religious, and many others express their religiosity or spirituality in more private ways (Stoppa & Lefkowitz, 2010). Arnett and Jensen (2002), for example, have coined the term “a congregation of one” to refer to the individualized belief systems that many youth develop. Even among many young people who identify with religious faiths, this faith is often expressed through prayer, meditation, or community service rather than through regular attendance at houses of worship.

There are exceptions to, and variations within, these trends. Some specific religious faiths confer an identity on their members that limits or precludes many of the activities that typically characterize the experiences of other individuals during emerging adulthood. For example, Nelson (2003) found that, among Mormon students attending a religious university, less than 5% drank alcohol, used illegal drugs, or engaged in sexual activity before marriage. Additionally, some areas or regions, such as the U.S. South, tend to be characterized by higher levels of public religiosity over time, compared to most other areas or regions (Uecker et al., 2007). Further, evidence indicates that religiosity is protective against risk-taking behavior—but primarily for heterosexual emerging adults (Rostosky, Danner, & Riggle, 2008). So the declines in religious participation, and the consequences of these declines for young people, represent a general trend that most, but not all, adolescents and emerging adults follow.

**Gender and Sexuality.** The majority of research on gender and sexual identity in adolescence and emerging adulthood focuses on sexual minorities (lesbian, gay, bisexual, and transgender youth) and on differences between sexual-minority and heterosexual individuals (see Morgan, 2013, for a more in-depth review). Savin-Williams (2011) has delineated three primary domains of sexuality: identity, attraction, and behavior—all of which may operate independently of one another. Indeed, there is evolutionary and neural evidence that sexual attraction and romantic love are largely nonoverlapping (Diamond, 2003; Diamond & Dickenson, 2012). For example, a young woman may identify as heterosexual, be attracted primarily to men, and engage in sexual behavior with both men and women. Sexual identity and behavior may be fluid, especially in women (Diamond, 2000), with bisexual individuals and those who continue to question their sexuality most likely to switch identities during late adolescence and emerging adulthood. Sexual-minority individuals whose sexual identities are consistent over time,

and who have immersed themselves within the sexual-minority community, tend to be most comfortable with their sexuality and to have disclosed their sexual identities to friends and family members (Floyd & Stein, 2002; Rosario, Schrimshaw, Hunter, & Braun, 2006).

Beyond the focus on sexual minorities, there is an emerging literature on sexual identity as a universal process (Dillon, Worthington, & Moradi, 2011; Worthington, Navarro, Savoy, & Hampton, 2008). According to this emerging perspective, through a variety of sexual experiences, young people from heterosexual as well as sexual-minority backgrounds explore and consider to whom they are attracted, what kinds of sexual behaviors they enjoy, and the ways in which they are most comfortable expressing affection and love. This type of exploration is independent of sexual orientation, which refers to the gender/genders of the people with whom one is most likely to engage in sexual relations.

**Ethnicity.** Although ethnicity was not among the domains originally enumerated within the identity status model, Schwartz (2001) and others have proposed that ethnicity may operate as an additional content domain for individuals from ethnic and cultural minority groups. Entire literatures have developed around *ethnic identity*, which refers to the extent to which one has considered the subjective importance of one's ethnic or cultural group (see Cokley, 2007; Phinney & Ong, 2007; Quintana, 2007; Syed & Mitchell, 2013, for reviews). Ethnic identity helps young people from ethnic or cultural minority groups to draw positive self-regard from their groups as well as to withstand discrimination and rejection from the dominant cultural group (Rivas-Drake, Hughes, & Way, 2008). Ethnic identity is especially important for individuals and groups who are visibly or culturally different from the mainstream cultural group and who cannot "pass" as members of the mainstream group (Umaña-Taylor, 2011). Such a description refers to the majority of individuals of Latin American, African, Asian, and Middle Eastern descent living in Western countries.

### **Additional Neo-Eriksonian Perspectives: Identity Style and Narrative Identity**

Aside from identity status, other prominent neo-Eriksonian identity models have also gained prominence (see Schwartz, Luyckx, & Vignoles, 2011, for a collection of reviews). Two of these models—identity style and narrative identity—are connected with identity status and are briefly discussed below.

**Identity Style.** Identity style was originally developed as a process-based extension of the identity status model—that is, an understanding of the decision-making processes that underlie identity development (Berzonsky, 1989). Three styles were proposed: *informational*, which refers to a proactive, open-minded, and flexible approach to addressing life choices; *normative*, which refers to adhering to the expectations and norms established by others (including cultural as well as familial guidelines); and *diffuse-avoidant*, which refers to

procrastination and attempting not to deal with important life decisions. By late adolescence, most individuals have the ability to use all three identity styles (Berzonsky, 1990). A large literature has amassed regarding the psychosocial and personality correlates of each of these three styles (see Berzonsky, 2011, for a comprehensive review). An informational style is linked with an active approach to constructing a sense of self, whereas a normative style is linked with a more passive approach (Caputi & Oades, 2001). Similarly, an informational style is associated with self-direction, autonomy, and agency, whereas a normative style is associated with perceiving one's decisions and behavior as being externally determined (Schwartz, Côte, & Arnett, 2005; Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens, 2005). An informational style tends to be most effective in cultural, familial, and other contexts where exploration and autonomous decision making are encouraged, whereas a normative style tends to be most effective in contexts where conformity and obedience are expected and valued (Bosma & Kunnen, 2001).

A robust set of connections has been established between the identity styles and the identity status model (e.g., Berzonsky & Neimeyer, 1994). In terms of status categories, individuals in moratorium and achievement tend to utilize an informational style; individuals in foreclosure tend to utilize a normative style; and individuals in diffusion tend to utilize a diffuse-avoidant style. The normative style is also sometimes linked with achievement, and the diffuse-avoidant style is sometimes linked with moratorium. In terms of exploration and commitment, an informational style is linked with exploration and flexible commitment; a normative style is linked with strong commitments and with the absence of exploration; and a diffuse-avoidant style is linked with the absence of commitment and of systematic exploration—although some haphazard and disorganized exploration may occur (Schwartz et al., 2005). A diffuse-avoidant style is negatively associated with all of the functions that identity is hypothesized to serve (Adams & Marshall, 1996): self-structure, internal consistency among one's roles and commitments, a set of personal goals, a reasonably predictable future, and a sense of personal control over one's life (Crocetti, Sica, Schwartz, Serafini, & Meeus, 2013). Normative and informational styles are generally positively related to these functions.

**Narrative Identity.** Although identity status and style research, along with most of the work on specific domains of identity, has been quantitatively focused, *narrative identity* has emerged as a qualitative complement to these quantitative traditions. Narrative identity research generally focuses on a person's life story, how she or he has made sense of the various experiences and "turning points" that comprise that life story, and the overall coherence and valence that characterizes the story (McAdams, 2011). The term *autobiographical reasoning* is invoked to refer to the ways in which one's life story is connected to one's current sense of self (Habermas & Bluck, 2000). Indeed, the ways in which turning point events, particularly events involving loss and trauma, are interpreted serve

as an index of the person's self-maturity (McLean, Pasupathi, & Pals, 2007). For example, a parent's death can be framed as a debilitating loss, as an opportunity for the person to develop self-sufficiency, or both.

Narrative research can complement the identity status approach in that it may be useful for understanding how a person has come to hold her or his identity commitments (e.g., Kiesling, Sorell, Montgomery, & Colwell, 2006; Syed & Azmitia, 2008). The ways in which life lessons are (or are not) extracted from memories—particularly turning point memories—can be interpreted as a type of identity exploration (McLean & Pratt, 2005). Indeed, McLean and Pratt (2005) found that emerging adults in the moratorium and achieved statuses engaged in the most mature meaning making, and that diffused and foreclosed emerging adults engaged in the least mature meaning making. In particular, the ability to recast a negative memory as a positive turning point or learning experience is closely associated with well-being and with being happy with one's life (McAdams, Reynolds, Lewis, Patten, & Bowman, 2001).

### *Concomitants and Consequences of Identity in Adolescence and Emerging Adulthood*

Beyond providing a theoretical and empirical characterization of how identity develops and is maintained, identity processes, statuses, styles, and narratives have also been shown to predict psychosocial and health outcomes. From an applied and public health perspective, the value of developing a consolidated and coherent identity lies in its ability to promote healthy life choices and to prevent risky decision making (Schwartz, 2005). Indeed, stating that one type of identity resolution (e.g., the achieved status) is more favorable than another (e.g., the troubled diffusion status) is valid only to the extent that the assumedly more favorable identity configuration is associated with healthier developmental and social outcomes within a given social, cultural, and historical context.

Although "health" can refer to any number of indicators, we will limit ourselves here to the four primary domains that have been referenced in identity research—well-being, distress/internalizing, externalizing/health risks, and health-promoting behaviors and outcomes in individuals with chronic diseases. Each of these domains is described in relation to identity in the following subsections. As is the case with this article as a whole, we focus primarily on identity status, with references to identity style, narrative identity, and domain-specific identity processes included where possible and appropriate.

**Well-Being.** Well-being is probably the most commonly investigated psychosocial correlate of identity processes and statuses. Well-being refers generally to positive adjustment, happiness, and satisfaction with one's life and relationships. Waterman (2008) reviews three specific variants of well-being: (a) subjective well-being, which refers to self-esteem, life satisfaction, and the absence of anxiety and depressive symptoms (Diener, 2006); (b) psychological well-being, which refers to a sense

of mastery over one's life tasks (e.g., satisfying relationships, a comfortable school or work environment; Ryff & Singer, 2008); and (c) eudaimonic well-being, which refers to having discovered one's calling and living in accordance with one's highest potentials (Waterman et al., 2010). In terms of identity status, Waterman (2007) found that a measure of achievement was positively related, and a measure of diffusion was negatively related, to all three forms of well-being. In terms of identity style, a number of studies (e.g., Phillips & Pittman, 2007; Vleioras & Bosma, 2005) have found that the informational and normative styles are positively related to self-esteem and psychological well-being, and that the diffuse-avoidant style is negatively related to these forms of well-being. In terms of narrative identity, turning points that are framed in terms of overcoming obstacles, self-direction, and personal growth tend to be linked with higher levels of psychological well-being (Bauer & McAdams, 2004a, 2004b).

Using empirically derived identity status categories (via cluster analysis) from the Luyckx et al. model, Schwartz, Beyers, et al. (2011) found that, generally speaking, the achieved status scored highest, whereas the carefree diffusion status scored lowest on all of the forms of well-being examined (self-esteem, presence of meaning in life, life satisfaction, psychological well-being, and eudaimonic well-being). In addition, although many earlier identity status studies found achievement and foreclosure to be virtually indistinguishable in terms of well-being (see Kroger & Marcia, 2011, for a review), Schwartz, Beyers, et al. (2011) found that achievers scored higher than foreclosers in terms of all of the well-being indicators except self-esteem and life satisfaction. The achieved and foreclosed statuses were generally equivalent on indicators reflecting contentment with one's life. However, on those indicators reflecting an ability or tendency to adapt to changing life circumstances or to live in accordance with one's "true self," achieved individuals scored significantly higher. What this pattern suggests is that foreclosure is adaptive as long as the person is able to rely on established norms and standards (e.g., those obtained from parents, religious leaders, or other authority figures), but that in rapidly changing contexts, achievement may be more adaptive.

When examining identity and well-being longitudinally, the differences between achievement and foreclosure vis-à-vis well-being were even more evident. Luyckx, Schwartz, Goossens, Soenens, and Beyers (2008) found that, among a sample of Belgian emerging adults, those in an achievement-type trajectory class were more likely to be classified into a high self-esteem trajectory class compared to a foreclosure-type class. Finally, Schwartz (2007) found that a latent construct labeled "identity consolidation"—comprising identity synthesis, commitment making, the achieved status, and other markers of Eriksonian identity resolution—was strongly correlated with a latent well-being composite consisting of self-esteem, purpose in life, and internal locus of control. Such a finding is highly consistent with Erikson's (e.g., 1950, 1968) writing—where he stated that identity provides individuals with a foundation through which they can develop a sense of



themselves, including a feeling of satisfaction with oneself (self-esteem), meaning and direction (purpose in life), and agency (internal locus of control).

Although achievement and foreclosure are linked with relatively high levels of well-being, the opposite is true of moratorium and diffusion. The developmental adequacy of moratorium has been called into question by way of its associations with well-being. Schwartz, Zamboanga, Weisskirch, and Rodriguez (2009) found that a continuously measured moratorium subscale (from the Extended Objective Measure of Ego Identity Status; Bennion & Adams, 1986) was closely related to identity confusion and negatively related to a composite index of well-being, reflecting self-esteem, purpose in life, and internal locus of control. Crocetti, Schwartz, Fermani, and Meeus (2010) found that reconsideration—which is representative of moratorium—is negatively associated with self-concept clarity (i.e., having a coherent sense of self; Campbell et al., 1996).

Schwartz, Klimstra, and colleagues (2011, 2012) found that reconsideration serves as a mechanism through which one's sense of self is revised when it is no longer satisfactory. That is, when one reevaluates one's commitments by exploring them in depth and finds that they are no longer workable in light of one's current goals or life circumstances, one is likely to seek an alternative set of commitments. Because commitments serve to anchor the person in a set of societal roles (e.g., parent, employee, student), relinquishing these commitments is likely to result in reductions in one's level of well-being (Crocetti, Klimstra, Keijsers, Hale, & Meeus, 2009). However, when new commitments are established, one's well-being may improve.

Both variants of diffusion may be linked with low levels of well-being (Luyckx et al., in press). In their longitudinal Belgian study, Luyckx et al. found that troubled-diffuse college students and working emerging adults reported the lowest levels of self-esteem and of perceived adulthood (e.g., "I feel that I have matured fully") over time. Schwartz, Beyers, et al. (2011), in a cross-sectional study of a large American college sample, found that carefree diffusion was associated with the lowest levels of self-esteem, internal locus of control, psychological well-being, and eudaimonic well-being. Erikson (1950) clearly enumerated two types of identity confusion: one where the person possesses a fragmented and incoherent sense of self (cf. troubled diffusion) and one where the person is uninterested in identity issues (cf. carefree diffusion). In a study of Belgian working emerging and young adults, Luyckx, Duriez, Klimstra, and De Witte (2010) found that those classified into troubled diffusion reported the least absorption into and dedication to their work. Skorikov (2007) found that, in a longitudinal study from mid-adolescence into emerging adulthood, career indecision, coupled with the absence of career planning and confidence—as a proxy for diffusion in the career domain—was inversely associated with self-actualization, life satisfaction, self-esteem, general self-efficacy, and emotional stability. Although different subtypes of diffusion may be more versus less adaptive in specific cultural and social contexts, it is clear that diffusion—regardless of what form it takes—is often associated with the poorest levels of well-being. Further, although

the poor well-being associated with moratorium may be a transitory part of the process of exploring options in breadth, the poor well-being associated with diffusion may be more difficult to overcome.

Within many of the domain-specific identity literatures, resolution of or satisfaction with one's commitments enacted within a given domain is linked with indicators of well-being. Abdel-Khalek and Lester (2010) found that, in both American and Kuwaiti emerging adults, religiosity was positively associated with life satisfaction and general happiness. Bauermeister et al. (2010) found that, among sexual-minority (nonheterosexual) adolescents and emerging adults, those who were involved in committed same-sex relationships reported higher self-esteem compared to those who were not in such relationships. With regard to ethnicity, Umaña-Taylor, Gonzales-Backen, and Guimond (2010) found that, among Hispanic adolescents, increases in ethnic identity exploration predicted increases in self-esteem. These results reinforce the conclusion that greater involvement in one's own self-definition and self-understanding is predictive of positive psychological functioning.

*Internalizing Symptoms.* A number of studies have examined identity processes and statuses in relation to anxiety, depression, and other forms of internalizing symptoms. One of the first such studies (Kidwell, Dunham, Bacho, Pastorino, & Portes, 1995) found that active identity exploration (moratorium) was associated with confusion, anxiety, and self-doubt, among other negative outcomes. Subsequent studies, using larger samples and more recently validated measures, have yielded similar conclusions. Schwartz et al. (2009) found that ongoing exploration in breadth was associated with symptoms of anxiety and depression, but that completed exploration (i.e., cases where the person explored in the past but is no longer doing so) was not associated with these symptoms. Within the classical Marcia paradigm, and as measured by the Extended Objective Measure of Ego Identity Status (the original paper-pencil measure of identity status; Bennion & Adams, 1986), engaging in identity exploration was assumed to require discarding one's commitments first. However, as noted earlier in this article, it is possible to consider identity alternatives without necessarily abandoning one's existing commitments (i.e., the searching moratorium status; Crocetti, Rubini, & Meeus, 2008). The extent to which the distress associated with classical moratorium can be alleviated by retaining at least some of one's prior commitments—that is, by following a "searching moratorium" route—has begun to be investigated using the Meeus model.

For example, Porfeli, Lee, Vondracek, and Weingold (2010), using the Meeus model, found that, within the career domain, university students in the searching moratorium status—more so than those in the classical moratorium status—reported elevated levels of stress, symptoms of anxiety and depression, and negative work experiences. Crocetti, Rubini, Luyckx, and Meeus (2008) found the opposite pattern in their sample of Dutch adolescents and emerging adults: individuals

assigned to the classical moratorium status scored significantly higher than their searching moratorium counterparts on symptoms of anxiety and depression. Crocetti, Rabaglietti, and Sica (2012) found that the difference in internalizing symptoms associated with the two moratorium statuses may vary according to the country or region in question. Specifically, in that study, classical moratorium was associated with significantly greater anxiety and depressive symptoms in Dutch adolescents and emerging adults, but the two moratorium statuses were equivalent in Italian adolescents and emerging adults. Because the developmental and cultural contexts for identity work during emerging adulthood differ across countries (e.g., Crocetti, Rabaglietti, & Sica, 2012; Klimstra, Luyckx, & Meeus, 2012), the distress associated with the classical versus searching moratorium statuses may also vary between one country and the next.

Two of the “active” ingredients in either kind of moratorium—reconsideration of commitments (Crocetti, Rubini, Luyckx, & Meeus, 2008) and ruminative exploration (Luyckx, Schwartz, Berzonsky, et al., 2008)—are both associated with anxiety and depressive symptoms (Crocetti et al., 2009; Luyckx et al., 2012; Schwartz, Klimstra, et al., 2011, 2012). A similar finding has emerged within the identity style literature. Using an Italian community sample, Fossati, Borroni, Feeney, and Maffei (2012) found that endorsement of a diffuse-avoidant style—which is elevated within the moratorium status—was positively correlated with features of borderline personality disorder—such as mood swings, emotional instability, and sudden outbursts of anger.

Individuals in either classical or searching moratorium are, by definition, thinking about—or experimenting with—new potential sets of goals, values, and beliefs; and the process of exploration appears to involve a sense of worry or concern that one might make a “wrong” choice. Our understanding of moratorium remains somewhat incomplete, however. Because the Luyckx and Meeus models have not been studied together in the published literature, we do not know the extent to which reconsideration and ruminative exploration overlap. We do know, however, that reconsideration and internalizing symptoms both tend to result from a poorly organized sense of self (Schwartz, Klimstra, et al., 2012). Exploration in breadth, then, appears to represent a response to a sense of self that is perceived as being in need of revision.

Narrative identity research supports the conclusion that internalizing symptoms are associated with dissatisfaction with one’s present sense of self or with lack of understanding of the rootedness of one’s current self within one’s life story. McLean, Pasupathi, and Pals (2007) review research suggesting that the inability to connect the turning points within one’s life to one’s current sense of self may be associated with diminished well-being (e.g., low self-esteem and unhappiness with one’s current life circumstances). McAdams, Reynolds, Lewis, Patten, and Bowman (2001) found that individuals who reinterpret positive events negatively (e.g., regretting entering into a romantic relationship) tend to report elevated levels of depressive symptoms. Dissatisfaction with any part of oneself—

where one’s current commitments and one’s life story represent parts of who one is (McAdams, 2011)—is linked with internalizing problems.

In terms of identity status research, although the achieved and foreclosed statuses differ in terms of some forms of well-being, they generally score equally low on internalizing problems (Crocetti, Rubini, Luyckx, & Meeus, 2008; Porfeli, Lee, Vondracek, & Weingold, 2011; Schwartz, Beyers, et al., 2011). Making commitments, whether through a period of exploration or through identification with significant others, appear to protect against symptoms of anxiety and depression. Stryker (2003) proposes that commitments serve to anchor the person within a specific set of roles—such as parent, employer, and doctor—that may elicit support from others. For example, someone serving in the role of “romantic partner and parent” may receive support from those around her or him (e.g., children, significant other).

Of course, emerging adults have generally not yet entered into these kinds of formal roles. Rather, they are considering what roles they wish to enter into as they transition into full adulthood. Nonetheless, the act of enacting life commitments (e.g., love relationships, career goals, religious or spiritual beliefs) serves to help reduce rumination and worry and to increase the degree of coherence within one’s sense of self—which can in turn help reduce symptoms of anxiety and depression (Luyckx, Schwartz, Goossens, & Pollock, 2008; Luyckx, Schwartz, Soenens, Vansteenkiste, & Goossens, 2010). If these commitments are later revisited and reconsidered, the individual may manifest increased anxiety and depressive symptoms at that time.

Diffusion is generally associated with high levels of anxiety and depressive symptoms (Kroger & Marcia, 2011). Diffused individuals generally evidence some form of identity confusion (Schwartz, Zamboanga, Wang, & Olthuis, 2009), which may prevent them from engaging in any type of systematic exploration that might move them out of the diffused status. It is not clear whether the troubled and carefree variants of diffusion are equally prone to internalizing symptoms. In their Belgian college student sample, Luyckx et al. (2005) chose the “carefree diffusion” label in part because individuals in this status appeared to manifest low levels of depressive symptoms compared to their troubled-diffused counterparts. However, Schwartz, Beyers, et al. (2011), using an American college sample, found that the two types of diffusion were equivalent in terms of general and social anxiety symptoms. Because the Luyckx model has not been used to compare multiple countries within the same sample, it is not clear whether the difference between the two types of diffusion varies according to the national context in question (as appears to be the case for the two variants of moratorium). It is possible that, in the United States—whose capitalist economic system forces people to compete against each other and does not provide much of a “safety net” for those who cannot compete successfully—individuals who are not progressing toward identifying with and actualizing their future plans may begin to worry that they will experience great difficulty competing for social resources

(such as jobs and economic capital; cf. Smith, 2010). In a more socialist European country, young people may feel freer to postpone or ignore identity issues during the adolescent and emerging adult years.

**Health Risk Behaviors.** Health risk behaviors—referring primarily to delinquent behavior, substance use, risky or unprotected sex, and drunk driving (cf. Jessor et al., 2003)—have been investigated in relation to personal identity only recently (there is more research on specific domains of identity, which we discuss below). In early studies on the link between personal identity and risk taking, Jones and colleagues (Jones & Hartmann, 1988; Jones, Hartmann, Grochowski, & Glider, 1989) found that diffused adolescents were most likely to drink alcohol and smoke marijuana. Hernandez and DeClemente (1992) found that, among sexually active college men, endorsement of characteristics associated with diffusion and moratorium was linked with engagement in unprotected sex.

More recent research has used either (a) measures of identity processes or (b) empirically derived identity status categories to examine linkages between identity and health risk behaviors. Using a direct measure of identity coherence and confusion, Schwartz and colleagues (Schwartz, Mason, Pantin, & Szapocznik, 2009; Schwartz, Pantin, Prado, Sullivan, & Szapocznik, 2005) found that, among Hispanic adolescents, identity confusion was predictive of delinquent behavior, cigarette smoking, alcohol use, early sex initiation, and unprotected sex. Luyckx, Goossens, Soenens, and Beyers (2006) found that a composite measure of exploration in breadth and ruminative exploration was positively related to drunkenness and marijuana use. Crocetti, Rubini, and Meeus (2008) found that reconsideration of commitments was related to delinquent behavior.

These results suggest that risky behavior may be reflective of a maladaptive identity structure, but that some forms of risk taking may represent a form of exploration. For example, some young people may experiment with negative behaviors, drugs and alcohol, and different forms of sexual activity as part of exploring their identities and “trying out” adult roles (Arnett, 2007b). Research has identified a fairly clear demarcation between individuals who experiment with problematic behavior and those whose levels of engagement are likely to persist into adulthood (Moffitt, 2006; Walton & Roberts, 2004). The risky behavior associated with moratorium, then, may be qualitatively different from the risky behavior associated with diffusion. Specifically, it is possible that individuals in moratorium use risky behaviors as a form of experimentation, whereas those in diffusion may use risky behaviors as a form of thrill seeking or self-medication.

Schwartz, Beyers, et al. (2011) further explored this possibility, using the Luyckx model, in a large sample of emerging-adult students from 30 American colleges and universities. Carefree diffusion, in particular, was associated with the highest reported levels of rule breaking and physical aggression as well as with the highest levels of use of several types of dangerous and illicit drugs (hard drugs, inhalants,

injecting drugs, and prescription drugs without a doctor’s authorization), several risky sexual practices (sex with three or more partners in a 30-day period, anal sex, and sex with strangers or brief acquaintances), and drunk driving. Carefree diffusion was the only status in which more than 10% of the participants had engaged in one or more types of dangerous drug use, in which more than 20% of the participants had engaged in sex with strangers or brief acquaintances, and in which more than 30% of the participants had driven while intoxicated during the 30 days prior to assessment. Although Luyckx et al. (2005) characterized this status as “carefree,” these individuals appeared to also manifest reckless and antisocial tendencies. Their lack of interest in identity issues—perhaps reflecting a short-term outlook on life—may indicate that they believe that they have “nothing to lose” in taking risks with their health (and potentially with the health of others). From an evolutionary perspective, Ellis et al. (2012) have suggested that high risk takers who engage in an array of unsafe behaviors may be following a “fast life history” trajectory, where short-term rewards are preferred over long-term goals. Such a trajectory may be adopted because of a series of adverse early experiences (e.g., family discord, exposure to crime and violence) or because one’s efforts to follow a conventional life path have been repeatedly thwarted. Carefree diffusion, and the risky and reckless behavior that often accompanies it, may represent an evolutionary response to repeated marginalization or failure for some individuals. Given that the overlap between identity and evolutionary psychology has only begun to be explored (Dunkel & Sefcek, 2009), further research is needed to investigate these hypothesized links in greater depth.

Specific dimensions of identity that appear to protect against risky behaviors include identity synthesis, commitment making, and a sense of consistency across time and place (i.e., that one is the “same person” in various situations; Schwartz et al., 2010). These dimensions of identity consolidation appear to be most protective against the use of dangerous drugs (hard drugs, inhalants, and prescription drugs without authorization from a doctor), against sex with strangers or casual acquaintances, and against riding with a drunk driver. Similarly, Skorikov and Vondracek (2007) found that self-development through work and positive attitudes toward schooling were protective against minor delinquency, alcohol use, and drug use in middle and high school students. What these sets of findings suggest is that holding commitments, possessing a synthesized and internally consistent sense of self, and being invested in one’s future create a long-term perspective that protects against engagement in behaviors that may be pleasurable in the short run but that may compromise one’s future. Ellis et al. (2012), in their evolutionary analysis of risky behavior, refer to such a strategy as a “slow life history” trajectory. The pattern of associations between identity processes and risky behaviors, then, suggests an important convergence between agency-based (rooted in self-determination) and evolutionary accounts of the adolescent and emerging adult age periods (see Dunkel & Sefcek, 2009, for a more in-depth treatment of this potential convergence).

Some specific identity domains have been strongly associated with risk-taking behavior. For heterosexual young people at least, spirituality and religiosity appear to be protective against drug and alcohol use and sexual risk taking (Hardy & Raffaelli, 2003; Rew & Wong, 2006). In terms of sexuality, Mustanski, Garofalo, Herrick, and Donenberg (2007) found that young gay and bisexual men are disproportionately likely to engage in hard drug use, to binge drink and smoke marijuana at least once per week, and to engage in unprotected sexual activity with multiple partners. For members of ethnic minority groups, evidence regarding the links between ethnic identity and risk-taking behavior is mixed. For example, some studies (e.g., Marsiglia, Kulis, Hecht, & Sills, 2004) have found ethnic identity to be protective against substance use, whereas other studies (e.g., Schwartz, Weisskirch, et al., 2011; Zamboanga, Raffaelli, & Horton, 2006; Zamboanga, Schwartz, Jarvis, & Van Tyne, 2009) have identified ethnic identity as a risk for substance use.

*Health-Promoting Behaviors and Outcomes in Chronic Disease Populations.* The newest area of identity research has involved effects of identity processes on health-promoting habits and behaviors. Much of this research has focused on emerging adults with chronic health problems such as diabetes and congenital heart disease, and much of this research has focused on personal identity. Luyckx, Seiffge-Krenke, et al. (2008) found that diabetic emerging adults classified into either of the diffused statuses were more likely to report problems with diet adherence compared to their counterparts classified into other statuses. Further, in that same study, adaptive identity development—operationalized as a latent variable with ruminative exploration loading negatively and the other four dimensions loading positively—was indirectly and negatively related to diabetes-related problems (food-related issues, treatment-related issues, emotional distress regarding diabetes, and social problems regarding diabetes) through adaptive and maladaptive coping. Luyckx and Seiffge-Krenke (2009) found that a positive self-concept—which is closely related to the maintenance of commitments (Schwartz, Klimstra, et al., 2011, 2012)—was protective against deteriorating A1c levels (a biomarker reflecting glucose control) in a longitudinal study of German diabetic adolescents and emerging adults. Luyckx, Goossens, Van Damme, and Moons (2011) found that, among juvenile congenital heart disease patients in Belgium, those classified into diffused diffusion reported the most physical health problems and the greatest amounts of anxiety about treatment; and those classified as foreclosed or carefree-diffused reported the lowest such symptoms. Madan-Swain et al. (2000) found that, among adolescent and emerging-adult cancer survivors, foreclosure was associated with a greater amount of time in remission. Foreclosure and carefree diffusion appear to require fewer psychological resources in terms of exploration in breadth and in depth, and this conservation of psychological energy may provide more resources for coping with the illness. In terms of domain-specific identity processes, specific religious and spiritual practices and activities (e.g., prayer, meditation) may

help young people to cope with chronic illnesses (Lee & Newberg, 2005).

For the most part, these results suggest the possibility that a coherent and well-organized sense of identity may facilitate illness-related coping and may protect against distress associated with chronic diseases. As a primary psychosocial task of adolescence and the transition to adulthood, the development of a sense of identity can serve as a critical resource in providing meaning and purpose to the lives of individuals who are facing chronic health conditions. In turn, having a sense of purpose and direction has the potential to protect against emotional difficulties involved in facing a chronic illness. Thus far, research has been conducted on individuals with diabetes, congenital heart disease, and childhood cancer. Similar patterns may emerge for survivors of other diseases, though empirical evidence is needed to examine this possibility.

### *Future Challenges for Identity Research*

In this final section, we outline a number of future directions and challenges for Eriksonian-based identity research with adolescents and emerging adults. The themes listed here are not intended to be exhaustive, but are rather intended to suggest some areas in which further work is needed.

*Attention to Important Public Health Issues.* Several years ago, Schwartz (2005) outlined a number of priority areas to which identity research should attend—internalizing problems and health risk behaviors, immigration and acculturation, and terrorism. The first of these areas—internalizing problems and health risk behaviors—has been addressed by a number of scholars in the past several years, as outlined earlier in this article. However, the other areas—acculturation (adjustment following international migration) and terrorism—have been sparsely studied within the neo-Eriksonian framework. Schwartz and colleagues have offered theoretical treatises on the role of personal identity in both acculturation (Schwartz, Montgomery, & Briones, 2006) and terrorism (Schwartz, Dunkel, & Waterman, 2009). However, empirical work in these areas has been scarce. The unprecedented number of international migrants living in countries other than where they were born, and the continuing threat of terrorist groups and cells around the world, highlights the need for attention to the role of identity in acculturation and in terrorism. Given that acculturation has been framed as an identity transformation (Sam & Berry, 2010) and that the allure of terrorist groups is often based on identities that they confer on their members (Post, 2005), the role of identity in these issues is essential to explore.

Further, increased attention to the role of identity in helping to prevent or manage diseases is needed. Luyckx and colleagues (e.g., Luyckx et al., 2011; Luyckx & Seiffge-Krenke, 2009) have examined the role of identity commitments and self-concept clarity in heart disease and diabetes. More research is needed in this direction. For example, aside from facilitating adaptive coping, does identity “get under the skin” to slow the progression of HIV, cancer, metabolic syndrome,



and other chronic health conditions? Does identity contribute to slowing disease progression even after other important disease-related variables have been accounted for? For example, there is ample evidence that psychological assets, such as well-being, have the potential to inhibit the progress of HIV (Ironson & Hayward, 2008). Do identity commitments provide the same type of protective effect? And drawing on Maden-Swain et al. (2000), are exploration in breadth, ruminative exploration, and reconsideration taxing and stressful for individuals with chronic health problems?

Further, other approaches to identity—particularly narrative identity—have much to contribute to the study of adaptation to chronic illnesses. Research strongly suggests that individuals with chronic diseases may experience strong disruptions in their sense of self (e.g., Bury, 1982; Charmaz, 1983). How do young people with diabetes, cancer, congenital heart disease, HIV, and other chronic diseases find meaning in their illnesses and in their lives? What specific turning points and life themes emerge in these individuals' narratives? Does the coherence and valence of their narratives affect the person's ability to cope with the disease—or the progression of the disease itself? This is an exciting direction for future research, particularly given the role of disease-related meaning making in the adaptation of individuals with chronic health problems (Stanton, Revenson, & Tennen, 2007).

*Identity Development From Adolescence to Emerging Adulthood.* A final set of questions involves the extension of identity issues from adolescence into emerging adulthood. As we noted at the beginning of this article, the emerging adult life stage was created by societal forces that distanced the end of adolescence from the assumption of full adult roles (Arnett, 1998; Côté, 2000). Emerging adulthood has been labeled (among other things) as the “age of identity exploration” (Arnett, 2007b, p. 69). However, adolescents clearly engage in identity work, even if most of this work involves reducing identity confusion (Schwartz, Mason, et al., 2009) and reconsidering commitments previously internalized from parents (Klimstra et al., 2010). How does one transition from the identity work of adolescence to the identity work of emerging adulthood? Does this transition occur similarly for individuals who attend colleges and universities as it does for those who enter the workforce immediately after completing their secondary education? Do identity development activities in adolescence and emerging adulthood operate similarly across gender and for individuals from majority versus minority ethnic groups? Do specific identity domains—such as gender and sexuality, religion and spirituality, politics, and career—necessarily come to ascendance during adolescence and emerging adulthood?

On another note, there is some evidence that the casting of exploration in breadth as the primary vehicle underlying identity development is most tenable in Western cultural contexts that emphasize individualism and self-reliance, and less so in Eastern contexts that emphasize interdependence and interpersonal harmony (Berman et al., 2011). If exploration in breadth is not the mechanism underlying identity development in

primarily collectivist societies, then what is? Bosma and Kunnen (2001) have suggested that imitation and identification may underlie identity formation in non-Western cultural contexts, but the ways in which these mechanisms lead to a sense of identity in non-Western contexts are not well understood. Do the Luyckx and Meeus models, as extensions of identity status, apply equally in various parts of the world? Are the majority of people in such contexts simply foreclosed, or is identity characterized by a completely different set of assumptions than those underlying the identity status model? Are there other identity models that would provide a more accurate representation of identity development in the non-Western world?

## Conclusion

In this article, we have reviewed the state of knowledge regarding a number of neo-Eriksonian identity approaches, most prominently the identity status model and its extensions. The identity status model has withstood a number of criticisms and has given rise to contemporary conceptualizations that have cast identity as a dynamic, iterative process. Other neo-Eriksonian approaches, such as narrative identity, have characterized identity in a similar way. Identity status research has progressed from mapping personality correlates of the statuses to examining the extent to which the statuses represent developmental trajectories and investigating associations of identity processes and configurations with mental and physical health. As Marcia (2001) noted some years ago, the identity status model has remained useful for much longer than he had expected, and it has inspired a number of other models that have furthered the understanding of what identity is and how it functions. However, much remains to be done. The potential with which Erikson (1950) imbued the construct of identity is only beginning to be realized, and we hope that the present review helps to promote increased work toward actualizing the potential of this construct.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

## References

- Abdel-Khalek, A. M., & Lester, D. (2010). Constructions of religiosity, subjective well-being, anxiety, and depression in two cultures: Kuwait and USA. *International Journal of Social Psychiatry, 58*, 138-145.
- Adams, G. R., & Marshall, S. K. (1996). A developmental social psychology of identity: Understanding the person-in-context. *Journal of Adolescence, 19*, 429-442.
- Archer, S. L. (1982). The lower age boundaries of identity development. *Child Development, 53*, 1551-1556.

- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development, 41*, 295-315.
- Arnett, J. J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist, 54*, 317-326.
- 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. (2005). The developmental context of substance use in emerging adulthood. *Journal of Drug Issues, 34*, 235-254.
- Arnett, J. J. (2007a). Suffering, selfish slackers: Myths and reality about emerging adults. *Journal of Youth and Adolescence, 36*, 23-29.
- Arnett, J. J. (2007b). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives, 1*, 68-73.
- Arnett, J. J., & Jensen, L. A. (2002). A congregation of one: Individualized religious beliefs among emerging adults. *Journal of Adolescent Research, 17*, 451-467.
- Balistreri, E., Busch-Rossnagel, N. A., & Geisinger, K. F. (1995). Development and preliminary validation of the Ego Identity Process Questionnaire. *Journal of Adolescence, 18*, 179-190.
- Barry, C. M., Nelson, L. J., Davarya, S., & Urry, S. (2010). Religiosity and spirituality during the transition to adulthood. *International Journal of Behavioral Development, 34*, 311-324.
- Bauer, J. J., & McAdams, D. P. (2004a). Growth goals, maturity, and well-being. *Developmental Psychology, 40*, 114-127.
- Bauer, J. J., & McAdams, D. P. (2004b). Personal growth in adults' stories of life transitions. *Journal of Personality, 72*, 573-602.
- Bauer, J. J., & McAdams, D. P. (2010). Eudaimonic growth: Narrative growth goals predict increases in ego development and subjective well-being 3 years later. *Developmental Psychology, 46*, 761-772.
- Bauermeister, J. J., Johns, M. M., Sandfort, T. G. M., Eisenberg, A., Grossman, A. H., & D'Augelli, A. (2010). Relationship trajectories and psychological well-being among sexual minority youth. *Journal of Youth and Adolescence, 39*, 1148-1163.
- Bennion, L. D., & Adams, G. R. (1986). A revision of the extended version of the Objective Measure of Ego Identity Status: An identity instrument for use with late adolescents. *Journal of Adolescent Research, 1*, 183-198.
- Berman, S. L., Yu, Y.-F., Schwartz, S. J., Teo, G., & Mochizuki, K. (2011). Asian identity formation: A cross national investigation of the validity of the identity status and distress constructs in China, Taiwan, Japan, and the United States. *Child and Youth Care Forum, 40*, 65-75.
- Berzonsky, M. D. (1989). Identity style: Conceptualization and measurement. *Journal of Adolescent Research, 4*, 267-281.
- Berzonsky, M. D. (1990). Self-construction over the lifespan: A process perspective on identity formation. In G. J. Neimeyer & R. A. Neimeyer (Eds.), *Advances in personal construct theory, volume 1* (pp. 155-186). Greenwich, CT: JAI Press.
- Berzonsky, M. D. (2011). A social-cognitive perspective on identity construction. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 55-75). New York, NY: Springer.
- Berzonsky, M. D., & Adams, G. R. (1999). Reevaluating the identity status paradigm: Still useful after 35 years. *Developmental Review, 19*, 557-590.
- Berzonsky, M. D., & Neimeyer, G. J. (1994). Ego identity status and identity processing orientation: The moderating role of commitment. *Journal of Research in Personality, 28*, 425-435.
- Beyers, W., & Seiffge-Krenke, I. (2010). Does identity precede intimacy? Testing Erikson's theory on romantic development in emerging adults of the 21st century. *Journal of Adolescent Research, 25*, 387-415.
- Bosma, H. A., & Kunnen, E. S. (2001). Determinants and mechanisms in ego identity development: A review and synthesis. *Developmental Review, 21*, 39-66.
- Bury, M. (1982). Chronic illness as biographical disruption. *Sociology of Health and Illness, 4*, 167-182.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70*, 141-156.
- Caputi, P., & Oades, L. (2001). Epistemic assumptions: Understanding self and the world (a note on the relationship between identity style, world view, and constructivist assumptions using an Australian sample). *Journal of Constructivist Psychology, 14*, 127-134.
- Charmaz, K. (1983). Loss of self: A fundamental form of suffering in the chronically ill. *Sociology of Health and Illness, 5*, 168-195.
- Cheng, M., & Berman, S. L. (2012). Globalization and identity development: A Chinese perspective. In S. J. Schwartz (Ed.), *Identity around the world: New directions for child and adolescent development* (pp. 103-121). New York, NY: Wiley.
- Cherlin, A. J. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family, 72*, 403-419.
- Cokley, K. (2007). Critical issues in the measurement of ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology, 54*, 224-234.
- Côté, J. E. (1993). Foundations of a psychoanalytic social psychology: Neo-Eriksonian propositions regarding the relationship between psychic structure and social institutions. *Developmental Review, 13*, 31-53.
- Côté, J. E. (2000). *Arrested adulthood: The changing nature of maturity and identity*. New York, NY: New York University Press.
- Côté, J. E., & Allahar, A. L. (1994). *Generation on hold: Coming of age in the late twentieth century*. Toronto, Canada: Stoddart.
- Côté, J. E., & Levine, C. (1988). A critical examination of the ego identity status paradigm. *Developmental Review, 8*, 147-184.
- Côté, J. E., & Schwartz, S. J. (2002). Comparing psychological and sociological approaches to identity: Identity status, identity capital, and the individualization process. *Journal of Adolescence, 25*, 571-586.
- Crocetti, E., Klimstra, T. A., Keijsers, L., & Hale, W. W., III, & Meeus, W. H. J. (2009). Anxiety trajectories and identity development in adolescence: A five-wave longitudinal study. *Journal of Youth and Adolescence, 38*, 839-849.
- Crocetti, E., Rabaglietti, E., & Sica, L. S. (2012). Personal identity in Italy. In S. J. Schwartz (Ed.), *Identity around the world: New directions for child and adolescent development* (pp. 87-102). New York, NY: Wiley.
- Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008). 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. (2008). 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. J., Fermani, A., & Meeus, W. (2010). 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., Schwartz, S. J., Fermani, A., & Meeus, W. (2010). 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. (2013). Identity styles, dimensions, statuses, and functions: Making connections among identity conceptualizations. *European Review of Applied Psychology*, 63, 1-13.
- Diamond, L. M. (2000). Sexual identity, attractions, and behavior among young sexual-minority women over a 2-year period. *Developmental Psychology*, 36, 241-250.
- Diamond, L. M. (2003). What does sexual orientation orient? A bio-behavioral model distinguishing romantic love and sexual desire. *Psychological Review*, 110, 173-192.
- Diamond, L. M., & Dickenson, J. A. (2012). The neuroimaging of love and desire: Review and future directions. *Clinical Neuropsychiatry*, 9, 39-46.
- Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Journal of Happiness Studies*, 7, 397-404.
- Dillon, F. R., Worthington, R. L., & Moradi, B. (2011). Sexual identity as a universal process. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 649-669). New York, NY: Springer.
- Duke, N. N., Skay, C. L., Pettingell, S. L., & Borowsky, I. W. (2009). From adolescent connections to social capital: Predictors of civic engagement in young adulthood. *Journal of Adolescent Health*, 44, 161-168.
- Dunkel, C. S. (2005). The relationship between self-continuity and measures of identity. *Identity: An International Journal of Theory and Research*, 5, 21-34.
- Dunkel, C. S., & Sefcek, J. A. (2009). Eriksonian lifespan theory and life history theory: An integration using the example of identity formation. *Review of General Psychology*, 13, 13-23.
- Dwairy, M. (2002). Foundations of psychosocial dynamic personality theory of collective people. *Clinical Psychology Review*, 22, 343-360.
- Dykstra, P. A., & Poortman, A.-R. (2010). Economic resources and remaining single: Trends over time. *European Sociological Review*, 26, 277-290.
- Ellis, B. J., Del Giudice, M., Dishion, T. J., Figueredo, A. J., Gray, P., & Griskevicius, V., . . . Wilson, D. S. (2012). The evolutionary basis of risky adolescent behavior: Implications for science, policy, and practice. *Developmental Psychology*, 48, 598-623.
- Erikson, E. H. (1950). *Childhood and society*. New York, NY: Norton.
- Erikson, E. H. (1958). *Young man Luther: A study in psychoanalysis and history*. New York, NY: Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.
- Erikson, E. H. (1969). *Gandhi's truth: On the origins of militant nonviolence*. New York, NY: Norton.
- Floyd, F. J., & Stein, T. S. (2002). Sexual orientation identity formation among gay, lesbian, and bisexual youths: Multiple patterns of milestone experiences. *Journal of Research on Adolescence*, 12, 167-191.
- Fossati, A., Borroni, S., Feeney, J., & Maffei, C. (2012). Predicting borderline personality disorder features from personality traits, identity orientation, and attachment styles in Italian nonclinical adults: Issues of consistency across age ranges. *Journal of Personality Disorders*, 26, 280-297.
- Freund, A. M., & Ritter, J. O. (2009). Midlife crisis: A debate. *Gerontology*, 55, 581-591.
- Fussell, E., Gauthier, A. H., & Evans, A. (2007). Heterogeneity in the transition to adulthood: The cases of Australia, Canada, and the United States. *European Journal of Population*, 23, 389-414.
- Goossens, L. (2001). Global versus domain-specific statuses in identity research: A comparison of two self-report measures. *Journal of Adolescence*, 24, 681-699.
- Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research*, 2, 203-222.
- Habermas, T., & Bluck, S. (2000). Getting a life: The development of the life story in adolescence. *Psychological Bulletin*, 126, 748-769.
- Hardy, S. A., & Raffaelli, M. (2003). Adolescent religiosity and sexuality: An investigation of reciprocal influences. *Journal of Adolescence*, 26, 731-739.
- Hernandez, J. T., & DiClemente, R. J. (1992). Self-control and ego identity development as predictors of unprotected sex in late adolescent males. *Journal of Adolescence*, 15, 437-447.
- Ironson, G., & Hayward, H. (2008). Do positive psychosocial factors predict disease progression in HIV-1? A review of the evidence. *Psychosomatic Medicine*, 70, 546-554.
- Jessor, R., Turbin, M. S., Costa, F. M., Dong, Q., Zhang, H., & Wang, C. (2003). Adolescent problem behavior in China and the United States: A cross-national study of psychosocial protective factors. *Journal of Research on Adolescence*, 13, 329-360.
- Jones, R. M., & Hartmann, B. R. (1988). Ego identity: Developmental differences and experimental substance use among adolescents. *Journal of Adolescence*, 11, 347-360.
- Jones, R. M., Hartmann, B. R., Grochowski, C. O., & Glider, P. (1989). Ego identity and substance abuse: A comparison of adolescents in residential treatment with adolescents in school. *Personality and Individual Differences*, 10, 625-631.
- Kidwell, J. S., Dunham, R. M., Bacho, R., Pastorino, E., & Portes, P. R. (1995). Adolescent identity exploration: A test of Erikson's theory of transitional crisis. *Adolescence*, 30, 785-793.
- Kiesling, C., Sorell, G. T., Montgomery, M. J., & Colwell, R. K. (2006). Identity and spirituality: A psychosocial exploration of the sense of spiritual self. *Developmental Psychology*, 42, 1269-1277.
- Klimstra, T. A., Hale, W. W., III, Raaijmakers, Q. W., Branje, S. T., & Meeus, W. H. J. (2010). Identity formation in adolescence: Change or stability? *Journal of Youth and Adolescence*, 39, 150-162.
- Klimstra, T. A., Luyckx, K., & Meeus, W. H. J. (2012). Personal identity in Belgium and The Netherlands. In S. J. Schwartz (Ed.),



- Identity around the world: New directions for child and adolescent development* (pp. 19-34). New York, NY: Wiley.
- Krettenauer, T. (2005). The role of epistemic cognition in adolescent identity formation: Further evidence. *Journal of Youth and Adolescence, 34*, 185-198.
- Kroger, J. (1996). Identity, regression, and development. *Journal of Adolescence, 19*, 203-222.
- 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, NY: Springer.
- Lee, B. Y., & Newburg, A. B. (2005). Religion and health: A review and critical analysis. *Zygon, 40*, 443-468.
- Luyckx, K., Duriez, B., Klimstra, T. A., & De Witte, H. (2010). Identity statuses in young adult employees: Prospective relations with work engagement and burnout. *Journal of Vocational Behavior, 77*, 339-349.
- Luyckx, K., Goossens, E., Van Damme, C., & Moons, P. (2011). Identity formation in adolescents with congenital cardiac disease: A forgotten issue in the transition to adulthood. *Cardiology in the Young, 21*, 411-420.
- 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., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of Adolescence, 29*, 361-378.
- Luyckx, K., Goossens, L., Soenens, B., Beyers, W., & Vansteenkiste, M. (2005). Identity statuses based on 4 rather than 2 identity dimensions: Extending and refining Marcia's paradigm. *Journal of Youth and Adolescence, 34*, 605-618.
- Luyckx, K., Klimstra, T. A., Schwartz, S. J., & Duriez, B. (in press). Personal identity in college and the work context: Developmental trajectories and psychosocial functioning. *European Journal of Personality*.
- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). 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, L., Beyers, W., & Missotten, L. (2011). A process-oriented model of identity formation and evaluation. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 77-98). New York, NY: Springer.
- Luyckx, K., Schwartz, S. J., Goossens, L., & Pollock, S. (2008). Employment, sense of coherence, and identity formation: Contextual and psychological processes on the pathway to sense of adulthood. *Journal of Adolescent Research, 23*, 566-591.
- Luyckx, K., Schwartz, S. J., Soenens, B., Vansteenkiste, M., & Goossens, L. (2010). The path from identity commitments to adjustment: Motivational underpinnings and mediating mechanisms. *Journal of Counseling and Development, 88*, 52-60.
- Luyckx, K., & Seiffge-Krenke, I. (2009). Continuity and change in glycemic control trajectories from adolescence to emerging adulthood: Relationships with family climate and self-concept in Type 1 diabetes. *Diabetes Care, 32*, 797-801.
- Luyckx, K., Seiffge-Krenke, I., Schwartz, S. J., Goossens, L., Weets, I., Hendrieckx, C., & Groven, C. (2008). Identity formation, coping, and adjustment in emerging adults with a chronic illness: The sample case of Type I diabetes. *Journal of Adolescent Health, 43*, 451-458.
- Luyckx, K., Soenens, B., Goossens, L., & Beckx, K., & Wouters, S. (2008). Identity exploration and commitment in late adolescence: Correlates of perfectionism and mediating mechanisms on the pathway to well-being. *Journal of Social and Clinical Psychology, 27*, 336-361.
- Madan-Swain, A., Brown, R. T., Foster, M. A., Vega, R., Byars, K., Rodenberger, W., Bell, B., & Lambert, R. (2000). Identity in survivors of childhood cancer. *Journal of Pediatric Psychology, 25*, 105-115.
- Malgwi, C. A., Howe, M. A., & Burnaby, P. A. (2005). Influences on students' choice of college major. *Journal of Education for Business, 80*, 275-282.
- Marcia, J. E. (2001). A commentary on Seth Schwartz's review of identity theory and research. *Identity: An International Journal of Theory and Research, 1*, 59-65.
- Marsiglia, F. F., Kulis, S., Hecht, M. L., & Sills, S. (2004). Ethnicity and ethnic identity as predictors of drug norms and drug use among preadolescents in the U.S. Southwest. *Substance Use and Misuse, 39*, 1061-1094.
- McAdams, D. P. (2011). Narrative identity. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Hand book of identity theory and research* (pp. 99-115). New York, NY: Springer.
- McAdams, D. P. (2013). Life authorship: A psychological challenge for emerging adulthood, as illustrated in two notable case studies. *Emerging Adulthood, 1*, 151-158.
- McAdams, D. P., Reynolds, J., Lewis, M., Patten, A. H., & Bowman, P. J. (2001). When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychosocial adaptation in midlife adults and in students. *Personality and Social Psychology Bulletin, 27*, 474-485.
- McLean, K. C., Pasupathi, M., & Pals, J. L. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review, 11*, 262-278.
- McLean, K. C., & Pratt, M. W. (2005). Life's little (and big) lessons: Identity statuses and meaning-making in the turning-point narratives of emerging adults. *Developmental Psychology, 42*, 714-722.
- 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., 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.
- Moffitt, T. E. (2006). A review of research on the taxonomy of life-course-persistent versus adolescence-limited antisocial behavior. In F. T. Cullen, J. P. Wright & K. R. Blevins (Eds.), *Taking stock: The status of criminological theory* (pp. 77-112). New Brunswick, NJ: Transaction Publishers.
- Morgan, E. (2013). Contemporary issues in sexual orientation and identity development in emerging adulthood. *Emerging Adulthood, 1*, 52-66.



- Mustanski, B., Garofalo, R., Herrick, A., & Donenberg, G. (2007). Psychosocial health problems increase risk for HIV among urban young men who have sex with men: Preliminary evidence of a syndemic in need of attention. *Annals of Behavioral Medicine, 34*, 37-45.
- National Center for Education Statistics. (2010). Digest of education statistics: 2010. Retrieved June 20, 2011 from [http://nces.ed.gov/programs/digest/d10/tables/dt10\\_197.asp?referrer=report](http://nces.ed.gov/programs/digest/d10/tables/dt10_197.asp?referrer=report)
- Nelson, L. J. (2003). Rites of passage in emerging adulthood: Perspectives of young Mormons. *New Directions for Child and Adolescent Development, 100*, 33-49.
- Obradović, J., & Masten, A. S. (2007). Developmental antecedents of young adult civic engagement. *Applied Developmental Science, 11*, 2-19.
- Pastorino, E., Dunham, R. M., Kidwell, J. S., Bacho, R. A., & Lamborn, S. D. (1997). Domain-specific gender comparisons in identity development among college youth: Ideology and relationships. *Adolescence, 32*, 559-577.
- Phillips, T. M., & Pittman, J. F. (2007). Adolescent psychological well-being by identity style. *Journal of Adolescence, 30*, 1021-1034.
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*, 271-281.
- Porfeli, E. J., Lee, B., Vondracek, F. W., & Weingold, I. K. (2010). A multi-dimensional measure of vocational identity status. *Journal of Adolescence, 34*, 853-871.
- Post, J. M. (2005). When hatred is bred in the bone: Psycho-cultural foundations of contemporary terrorism. *Political Psychology, 26*, 615-636.
- Quintana, S. M. (2007). Racial and ethnic identity: Developmental perspectives and research. *Journal of Counseling Psychology, 54*, 279-270.
- Rew, L., & Wong, Y. J. (2006). A systematic review of associations among religiosity/spirituality and adolescent health attitudes and behaviors. *Journal of Adolescent Health, 38*, 433-442.
- Rivas-Drake, D., Hughes, D., & Way, N. (2008). A closer look at peer discrimination, ethnic identity, and psychological well-being among urban Chinese American sixth graders. *Journal of Youth and Adolescence, 37*, 12-21.
- Rosario, R., Schrimshaw, E. W., Hunter, J., & Braun, L. (2006). Sexual identity development among lesbian, gay, and bisexual youths: Consistency and change over time. *Journal of Sex Research, 43*, 46-58.
- Rostosky, S. S., Danner, F., & Riggle, E. D. B. (2008). Religiosity and alcohol use in sexual minority and heterosexual youth and young adults. *Journal of Youth and Adolescence, 37*, 552-563.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies, 9*, 13-39.
- Sam, D. L., & Berry, J. W. (2010). Acculturation: When individuals and groups of different backgrounds meet. *Perspectives on Psychological Science, 5*, 472-481.
- Savin-Williams, R. C. (2011). Identity development among sexual minority youth. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 671-689). New York, NY: Springer.
- Schwartz, S. J. (2001). The evolution of Eriksonian and neo-Eriksonian identity theory and research: A review and integration. *Identity: An International Journal of Theory and Research, 1*, 7-58.
- Schwartz, S. J. (2005). A new identity for identity research: Recommendations for expanding and refocusing the identity literature. *Journal of Adolescent Research, 20*, 293-308.
- Schwartz, S. J. (2007). The structure of identity consolidation: Multiple correlated constructs or one superordinate construct? *Identity: An International Journal of Theory and Research, 7*, 27-49.
- Schwartz, S. J., Beyers, W., Luyckx, K., Soenens, B., Zamboanga, B. L., & Forthun, L. F., . . . Waterman, A. S. (2011). Examining the light and dark sides of emerging adults' identity: A study of identity status differences in positive and negative psychosocial functioning. *Journal of Youth and Adolescence, 40*, 839-859.
- Schwartz, S. J., Côté, J. E., & Arnett, J. J. (2005). Identity and agency in emerging adulthood: Two developmental routes in the individualization process. *Youth and Society, 37*, 201-229.
- Schwartz, S. J., Donnellan, M. B., Ravert, R. D., Luyckx, K., & Zamboanga, B. L. (2013). Identity development, personality, and well-being in adolescence and emerging adulthood: Theory, research, and recent advances. In I. B. Weiner (Series Ed.), and R. M. Lerner, A. Easterbrooks, J. Mistry (Vol. Eds.), *Handbook of psychology, vol. 6: Developmental psychology* (pp. 339-364). New York, NY: John Wiley and Sons.
- Schwartz, S. J., Dunkel, C. S., & Waterman, A. S. (2009). Terrorism: An identity theory perspective. *Studies in Conflict and Terrorism, 32*, 537-559.
- Schwartz, S. J., Forthun, L. F., Ravert, R. D., Zamboanga, B. L., Rodriguez, L., & Umaña-Taylor, A. J., . . . Hudson, M. (2010). Identity consolidation and health risk behaviors in college students. *American Journal of Health Behavior, 34*, 214-224.
- Schwartz, S. J., Klimstra, T. A., Luyckx, K., Hale, W. W., III, & Frijns, T., . . . Meeus, W. H. J. (2011). Daily dynamics of personal identity and self-concept clarity. *European Journal of Personality, 25*, 373-385.
- Schwartz, S. J., Klimstra, T. A., Luyckx, K., Hale, W. W., III, & Meeus, W. H. J. (2012). Characterizing the self-system over time in adolescence: Internal structure and associations with internalizing symptoms. *Journal of Youth and Adolescence, 41*, 1208-1225.
- Schwartz, S. J., Luyckx, K., & Vignoles, V. L. (Eds.) (2011). *Handbook of identity theory and research*. New York, NY: Springer.
- Schwartz, S. J., Mason, C. A., Pantin, H., & Szapocznik, J. (2009). Longitudinal relationships between family functioning and identity development in Hispanic immigrant adolescents: Continuity and change. *Journal of Early Adolescence, 29*, 177-211.
- Schwartz, S. J., Montgomery, M. J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions, and applied recommendations. *Human Development, 49*, 1-30.
- Schwartz, S. J., Pantin, H., Prado, G., Sullivan, S., & Szapocznik, J. (2005). Family functioning, identity, and problem behavior in Hispanic immigrant early adolescents. *Journal of Early Adolescence, 25*, 392-420.
- Schwartz, S. J., Weisskirch, R. S., Zamboanga, B. L., Castillo, L. G., Ham, L. S., & Huynh, Q.-L., . . . Cano, M. A. (2011). Dimensions of acculturation: Associations with health risk behaviors among college students from immigrant families. *Journal of Counseling Psychology, 58*, 27-41.

- Schwartz, S. J., Zamboanga, B. L., Wang, W., & Olthuis, J. V. (2009). Measuring identity from an Eriksonian perspective: Two sides of the same coin. *Journal of Personality Assessment, 91*, 143-154.
- Schwartz, S. J., Zamboanga, B. L., Weisskirch, R. S., & Rodriguez, L. (2009). The relationships of personal and ethnic identity exploration to indices of adaptive and maladaptive psychosocial functioning. *International Journal of Behavioral Development, 33*, 131-144.
- Sherrod, L. R. (2008). Adolescents' perceptions of rights as reflected in their views of citizenship. *Journal of Social Issues, 64*, 771-790.
- Skorikov, V., & Vondracek, F. W. (2007). Positive career orientation as an inhibitor of adolescent problem behavior. *Journal of Adolescence, 30*, 131-146.
- Smith, V. (2010). Enhancing employability: Human, cultural, and social capital in an era of turbulent unpredictability. *Human Relations, 63*, 279-303.
- Sneed, J. R., Whitbourne, S. K., Schwartz, S. J., & Huang, S. (2012). The relationship between identity, intimacy, and midlife well-being: Findings from the Rochester Adult Longitudinal Study. *Psychology and Aging, 27*, 318-323.
- Soenens, B., Berzonsky, M. D., Vansteenkiste, M., Beyers, W., & Goossens, L. (2005). Identity styles and causality orientations: In search of the motivational underpinnings of the identity exploration process. *European Journal of Personality, 19*, 427-442.
- Stanton, A. L., Revenson, T. A., & Tennen, H. (2007). Health psychology: Psychological adaptation to chronic disease. *Annual Review of Psychology, 58*, 565-592.
- Stephen, J., Fraser, E., & Marcia, J. E. (1992). Moratorium-achievement (Mama) cycles in lifespan identity development: Value orientations and reasoning system correlates. *Journal of Adolescence, 15*, 283-300.
- Stoppa, T. M., & Lefkowitz, E. S. (2010). Longitudinal changes in religiosity among emerging-adult college students. *Journal of Research on Adolescence, 20*, 23-38.
- Stryker, S. (2003). Whither symbolic interaction? Reflections on a personal odyssey. *Symbolic Interaction, 26*, 95-109.
- Syed, M., & Mitchell, L. L. (2013). Race, identity, and emerging adulthood: Retrospect and prospects. *Emerging Adulthood, 1*, 83-95.
- Syed, M., & Azmitia, M. (2008). A narrative approach to ethnic identity in emerging adulthood: Bringing life to the identity status model. *Developmental Psychology, 44*, 1012-1027.
- Uecker, J. E., Regnerus, M. D., & Vaaler, M. L. (2007). Losing my religion: The social sources of religious decline in early adulthood. *Social Forces, 85*, 1667-1692.
- Umaña-Taylor, A. J. (2011). Ethnic identity. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 791-809). New York, NY: Springer.
- Umaña-Taylor, A. J., Gonzales-Backen, M. A., & Guimond, A. B. (2010). Latino adolescents' ethnic identity: Is there a developmental progression and does growth in ethnic identity predict growth in self-esteem? *Child Development, 80*, 391-405.
- U.S. Census Bureau. (2011). *2011 Statistical Abstract of the United States*. Retrieved June 20, 2011 from <http://www.census.gov/compendia/statab/cats/population.html>
- van Hoof, A. (1999). The identity status field re-reviewed: An update of unresolved and neglected issues with a view on some alternative approaches. *Developmental Review, 19*, 497-556.
- Vleioras, G., & Bosma, H. A. (2005). Are identity styles important for psychological well-being? *Journal of Adolescence, 28*, 397-409.
- Walton, K. E., & Roberts, B. W. (2004). On the relationship between substance use and personality traits: Abstainers are not maladjusted. *Journal of Research in Personality, 38*, 515-535.
- Waterman, A. S. (2007). Doing well: The relationship of identity status to three conceptions of well-being. *Identity: An International Journal of Theory and Research, 7*, 289-307.
- Waterman, A. S. (2008). Reconsidering happiness: A eudaimonist's perspective. *Journal of Positive Psychology, 3*, 234-252.
- Waterman, A. S., Schwartz, S. J., Zamboanga, B. L., Ravert, R. D., Williams, M. K., Agocha, V. B., Kim, S. Y., & Donnellan, M. B. (2010). The questionnaire for eudaimonic well-being: Psychometric properties, demographic comparisons, and evidence of validity. *Journal of Positive Psychology, 6*, 41-61.
- Wiik, K. A. (2009). 'You'd better wait!'—Socioeconomic background and timing of first marriage versus first cohabitation. *European Sociological Review, 25*, 139-153.
- Worthington, R. L., Navarro, R. L., Savoy, H. B., & Hampton, D. (2008). Development, reliability, and validity of the measure of sexual identity exploration and commitment (MoSIEC). *Developmental Psychology, 44*, 22-33.
- Youniss, J., Bales, S., Christmas-Best, V., Diversi, M., McLaughlin, M., & Silbereisen, R. (2003). Youth civic engagement in the twenty-first century. *Journal of Research on Adolescence, 12*, 121-148.
- Youniss, J., & Yates, M. (1996). A developmental perspective on civic involvement in adolescence. *Social Development, 5*, 85-111.
- Zamboanga, B. L., Raffaelli, M., & Horton, N. J. (2006). Acculturation status and heavy alcohol use among Mexican American college students: An investigation of the moderating role of gender. *Addictive Behaviors, 31*, 2188-2198.
- Zamboanga, B. L., Schwartz, S. J., Jarvis, L. H., & Van Tyne, K. (2009). Acculturation and substance use among Hispanic early adolescents: Investigating the mediating roles of acculturative stress and self-esteem. *Journal of Primary Prevention, 30*, 315-333.

### Author Biographies

**Seth J. Schwartz** is an associate professor of epidemiology and public health at the University of Miami. He holds a PhD in developmental psychology from Florida International University. His research interests are personal and cultural identity, family relationships, and mental health in adolescence and emerging adulthood.

**Byron L. Zamboanga** is an associate professor in the Department of Psychology at Smith College. His primary research interests focuses on the cognitive, social, and cultural correlates of alcohol use among adolescents and emerging adults.

**Koen Luyckx** is an assistant research professor at the Center for School Psychology and Child and Adolescent Development at Katholieke Universiteit Leuven, Leuven, Belgium. He obtained

his PhD in 2006 from the same university. His current research interests include identity development, parenting, psychosocial functioning, and biopsychosocial adaptation to chronic illness.

**Alan Meca** is a third-year doctoral student in the Developmental Psychology program at Florida International University. His research interests are centered around positive and progressive developmental change during adolescence and emerging

adulthood, with a specific focus on the development of a sense of self and identity, empowerment, and well-being.

**Rachel A. Ritchie** is an adjunct instructor in psychology at Florida International University. She holds a PhD in life-span human development, and her research interests are mental health, identity development, risk behaviors, positive psychology, and positive youth development.